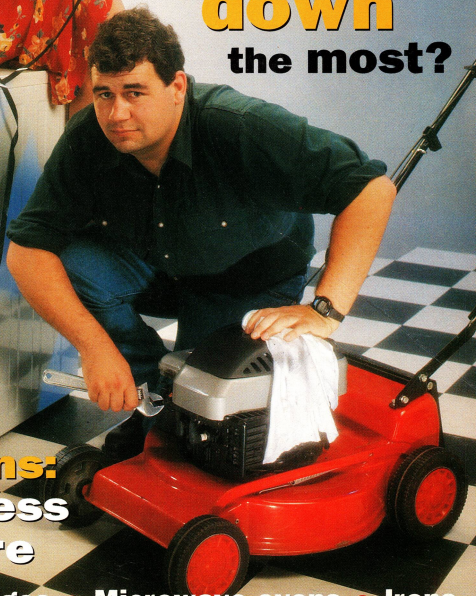


CHOICE

**Which appliances
— and which
brands —
break
down
the most?**



**Home loans:
how to pay less
and get more**

TESTS: 400 L fridges • Microwave ovens • Irons

Living in the financial jungle



Jane Mackenzie

Home loans aren't as simple as they used to be — no longer do you just acquire a loan and pay it off gradually over many years.

Now you can choose a loan that lets you save money at the same time, or one that lends you more money as you pay it off if you need it. You can pay extra money into your loan but still get it back again if you want it, and you can fix your interest rate for a period of time if you think rates

are going to rise in the near future.

So how do you decide what's best for you? Our comprehensive report on home loans (starting on page 29) leads you through the types of loan and the decisions you need to make, pointing out issues such as tax benefits and low fees that are worth looking out for. And for individual advice on which home loan to choose, you can ring our MONEYCHOICE\$ service on 1900 17 00 88 (the average call cost is around \$7).

Home loans aren't just of interest to new home buyers these days — it's worthwhile looking at some options to your existing home loan to see if there's a way to pay it off sooner, to pay less interest or to gain some other advantage your current loan doesn't give you.

As with most financial products, this range of options makes your decision much less straightforward than it used to be. CHOICE's aim is to give you the information to help make those decisions, or you can let MONEYCHOICE\$ do the hard work for you by giving you a list of the cheapest available loans for your circumstances.

Life isn't easy out there in the financial jungle — we'll keep providing the information to help you avoid being bitten.

Jane Mackenzie, Editor

Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow your letter up. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.

Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.

Phone us on (02) 9577 3399.

Fax us on (02) 9577 3355.

email us at ausconsumer@choice.com.au

World Wide Web address: <http://www.sofcom.com.au/ACA/>

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June 1997

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Some products are prone to breaking down, so choosing a reliable brand can save you money and hassle. Find out here which brands are most reliable.

Cover photo:
Kent Mears



Choice Regulars

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Beanbags can be a health hazard for kids — page 5.

There was two hours' difference between the best and worst fridges for cooling efficiency in our test. See page 14.



Choice Reports

29 Home loans

Mortgage interest rates are at their lowest for 20 years, and they're offering an increasing range of options. It's a great time for new home buyers, but even if you took out your loan some years ago, it's worthwhile looking at what's available now and considering a move.

...AND DO YOU
GLEN AND PHOER
TAKE YOU
MR SIMKISS
FROM THE
BANK...?

THEY
DO!

▲ Just choosing a home loan these days is hard work, never mind paying it off — page 29.

Choice Tests

14 400 L fridges

Our tests confirmed that a bigger price tag doesn't guarantee better performance or features — and that the fridge's energy efficiency can dramatically affect its cost to you over its lifetime.

38 Irons

Our trialists found some models that help make ironing less of a chore.

42 Compact microwave ovens

Smaller microwaves now come with many of the features you used to only get on family-size models — we report on nine of them.

▲ Most irons get creases out OK, but do they drive you mad in the process? Our trialists picked the good and the bad, see page 38.



Even small microwaves have features like a child safety lock these days. Page 42



Print problems with April CHOICE

We were alerted to a printing problem in some copies of April CHOICE by subscribers who received faulty copies of their magazine. If you were unlucky enough to receive a copy from this batch we apologise for the inconvenience, and if we haven't done so already we'd like to replace your magazine. Just call or write to our Consumer Information Service on (02) 9577 3399 (address on page 2) with your subscriber number and we'll send you a replacement copy.

Coming in the next three issues

Tests: Food processors, vacuum cleaners, dishwashers, aluminium foil and cling wrap, impact drills, fax machines, doner kebabs, washing machines, insulation, pramettes.

▲ Pramettes: a cross between a pram and a stroller.



Reports: Comprehensive car insurance, third-party car insurance, alternative medicine, soap, fluoride in water, your shopping rights, cleaning your car the green way, childbirth choices, food safety, smoke alarms and fire safety, organising a funeral, how to read a company prospectus.

We try to bring you tests and reports in the planned month, but sometimes have to move an article because of problems that occur during testing and research, or for lack of space in a particular issue. We apologise if this causes any inconvenience.

CHOICEcuts

A 'NewStart' for 'HeartSmart' eggs?

IN JUNE 1995, CHOICE expressed concern about HEARTSMART eggs. We thought the name and some of the marketing claims were potentially misleading in their health implications.

Around the same time, the Australian Competition and Consumer Commission took action and the eggs' producers changed the name to NEWSTART — but we're not convinced their new claims are any more helpful.

NEWSTART eggs are enriched with omega-3 fats, which may reduce the likelihood of blood clots if eaten in adequate amounts. The label now claims that omega-3 fats are "beneficial to heart function".

These claims have been toned down from the HEARTSMART label's "eggs you can eat until your heart's content", and the label also recommends eating eggs in moderation. But CHOICE

still thinks the packaging may give the impression that eating NEWSTART eggs can protect you from heart disease no matter who you are or how many you eat. It may also distract people from the important message of a balanced diet.

Our current laws don't allow food companies to make any form of health or therapeutic claim about their products. We agree with this — we think consumers will only get part of the nutrition picture if health claims are allowed on our foods. And we think the blurb on the NEWSTART package sails pretty close to the wind with regard to being interpretable as a health claim.

This doesn't mean you should avoid omega-3 eggs — in fact you may even benefit from swapping to them. But it's worth looking beyond the information on the label: NEWSTART eggs have the same level of saturated fat and cholesterol as ordinary eggs. So if you have high cholesterol, don't eat more eggs than usual just because they contain omega-3s.

Fruit fiction



Fruit by any other name is probably not fruit.

IT'S ALWAYS INTERESTING to watch how manufacturers get around regulations. We found this example while researching last month's article on breakfast cereals.

The manufacturers can't use the word 'fruit' in the names because there isn't actually any fruit in the cereals, so they've become inventive with variations on the spelling of the word. Perhaps it's OK as long as nobody expects to find any fruit in these cereals!



NewStart eggs: the label sails pretty close to making health claims, which is illegal.

Open slather on bank fees?

Bank fees could rise even faster following the recommendations of the recent Wallis Inquiry. The Financial Systems Inquiry, headed by Stan Wallis, has delivered a report which will shape the finance sector well into the 21st century.

There's some good news for consumers — the recommendations include greater choice when it comes to your superannuation, improvements to complaint schemes, and a push

for privacy protection. And though Wallis gave a green light to big bank mergers — which

we think reduces consumer choice and gives the banks too much muscle — fortunately



the government put on the brakes, at least temporarily, in its response.

But there's bad news too, the recommendations weaken consumer protection laws and we could even see open slather on bank fees. Currently Treasurer Peter Costello has the power to monitor fee increases and play tough with the banks in Parliament. Wallis wants to take these powers away — great news for the banks, but it could mean worse to come for the rest of us.

We'll keep you posted.

Explaining barcodes

THEY'VE BEEN PART OF our lives for almost two decades, and we see them every day on products we buy and use, but how do barcodes work? Subscribers H and D Rayward of Kyogle, NSW, recently asked us to explain the various sections of the barcode, and what the numbers mean.

Essentially, a barcode is a series of contrasting (usually black and white) lines of various widths which represent a 13-digit number (printed below the lines).

In order for a product to be given a barcode, the manufacturer has to become a member of EAN Australia, a non-profit organisation that administers the barcode system. EAN stands for European Article Number, which is the official name for the barcode internationally.

EAN then allocates numbers to members, ensuring there is no duplication along the way. The first two numbers in the code usually indicate the country in which the manufacturer is based, or from which country the EAN number has been issued. (Manufacturers in countries that don't have an

EAN organisation can join branches in other countries, so, for example, a manufacturer in a small south Pacific country could register with EAN Australia.)

If you see 93 at the beginning of a barcode, it indicates the number has been issued by EAN Australia — but that doesn't automatically mean the product was made here.

The next five digits are the manufacturer's EAN member number. The following five digits are for the manufacturer to allocate to a product, to identify it.

The final digit is a 'check' digit, so that when the barcode is picked up by, say, a supermarket scanner, the computer runs a mathematical formula to ensure it's valid.

The product's price is allocated by the shop from which you buy it, and entered into the scanner's computer. The scanner recognises the lines of the barcode and translates them into the 13-digit number. The computer matches the number to the product and its price, which then comes up on the register and is usually printed on your docket.

Beanbags: the beans can be dangerous to children.



Home-made tragedy

THE NSW MINISTER FOR Fair Trading has warned against the dangers of home-made beanbags.

The lightweight polystyrene balls used as filling can easily be breathed in or swallowed by children. The balls can get stuck in children's airways, causing them to suffocate. At least two such tragedies have already occurred.

Beanbag manufacturers are required to close their product

in a way that is child-resistant, and to label it "WARNING: Small lightweight beads present a severe danger to children if swallowed or inhaled".

If you make your own beanbag we suggest that you remove the tag from the zip to make sure it can't be easily opened by children. If you need to open the bag, you can use a paper clip as a temporary tag.

Want to work for CHOICE?

CHOICE is looking for someone to join its quality assurance team. We need someone who is comfortable dealing with and interpreting technical and research information, most probably with a degree in a science or technology field and/or wide-ranging employment experience where such skills have been developed.

It's vital that you have excellent communication and negotiation skills, both oral and written, and that you demonstrate maturity, judgment and meticulous attention to detail, without being dogmatic. An interest in consumer issues and the ability to be flexible about work times are also important.

The position is equivalent to four days a week (but not necessarily four days every week), based in Sydney, and will involve a mixture of end-point quality checking ('verification') and proofing and collation of article drafts. Salary is dependent on qualifications and experience — around \$26,000 per year.

For a full job description contact Barbara Manchester on (02) 9577 3313, or send your résumé to her at 57 Carrington Road, Marrickville 2204, marked "Quality assurance position". Please have your applications in by June 18, 1997.



Barcodes are a way of life, but how do they work?

Which brands to trust?

When you shop for a new appliance, you're likely to use our test results to compare the performance and ease of use of models. However, the reliability of the brand you buy can be equally important.

IN BRIEF

- Some products are much more likely to break down than others. Choosing a reliable brand can save you a lot of money and hassle.
- With other products you don't have to worry as much about reliability — just pick a model that did well in our tests.

IF YOU CHOOSE A RELIABLE BRAND OVER a less reliable one, you're likely to save yourself money and time on repairs or getting it replaced. In addition, it helps to protect the environment: for example, it prevents your product from ending up in a landfill prematurely, and it saves the energy and resources used to produce a replacement model.

While CHOICE can't test the long-term durability of products, we regularly ask you about your experiences with the reliability of certain appliances (see *Our survey*, right). The results of these surveys are frequently published with the relevant test reports.

In this article we summarise the results of our last three surveys: it covers 16 products and more than 75 brands.

Figure 1 on this page compares the overall reliability of the products. Repairs were very rare for electric heaters, portable CD players and microwave ovens.

At the other end of the scale, about one in five petrol lawn trimmers and dishwashers, and almost one in four washing machines, petrol lawnmowers and VCRs needed repair during the 12 months before the survey. CHOICE thinks this is too high a percentage and urges manufacturers to improve the reliability of those products — particularly because the average cost of repair for some of them can easily exceed \$100 (see Figure 2).



For products that proved less reliable in our survey, you definitely should consider the reliability of brands before you buy: the graphs on the following pages give more detailed information.

Figure 1. Percentage needing repair in the 12 months before the survey

(Figures in brackets indicate the number reported on for each product)

Electric heaters (2887)	5
Portable CD players (971)	6
Microwave ovens (4227)	6
CD players (not portable) (3267)	8
Electric lawn trimmers (963)	9
Refrigerators (5153)	10
Air conditioners (1443)	11
Televisions (5127)	11
Vacuum cleaners (5341)	12
Electric wall ovens (1765)	14
Electric ranges (1180)	15
Petrol lawn trimmers (1890)	20
Dishwashers (2259)	21
Washing machines (5114)	23
Petrol lawnmowers (3706)	24
VCRs (4733)	24



Figure 2. Average cost of last repair (\$)

Electric heaters	59
Electric lawn trimmers	60
Petrol lawn trimmers	63
Vacuum cleaners	71
Petrol lawnmowers	77
Portable CD players	87
Microwave ovens	93
VCRs	98
Televisions	101
Electric ranges	106
Electric wall ovens	112
Dishwashers	113
Washing machines	118
CD players (not portable)	119
Refrigerators	132
Air conditioners	182

OUR SURVEY

Once every year we send out questionnaires about the reliability of certain appliances to a random sample of CHOICE subscribers. We aim to find out:

- How old your appliance is.
- Whether it has had a problem during the past 12 months.
- Whether you had repaired during the past 12 months. Not all problems necessarily lead to repairs (for example, you may choose to live with a broken oven light rather than having it fixed), or are mentioned as a repair in the survey (for example, you may buy and install a new oven light yourself).
- If so, how much it cost you to repair it.
- Whether you would buy the same brand again.

This report includes the results of three surveys carried out between 1994 and 1996.

We've only included brands on which at least 50 people reported (the number in brackets after the brand name refers to the number of responses we received for that brand) — so you may not find your brand in the tables.

Our survey doesn't set an age limit for the appliances, which means the graphs may show results for brands that you can't buy new any more. However, it still gives you valuable information if you want to buy secondhand products.

Many thanks to all who took part.

HOW TO READ THE GRAPHS

For each appliance on the following pages we show you two graphs:

Reliability

The first graph tells you the percentage of each brand that didn't need repair during the 12 months before the survey. The black bars indicate how closely our survey results would be likely to match reality if we were able to survey all households. The shorter the bar is, the closer our results are likely to be to reality. The bar gets shorter when there are:

- A high number of responses for the brand.
- A high proportion of models without problems for the brand.

Let's have a look at our survey results for dishwashers on page 9, for example. Although **MIELE** had a much higher percentage of models not needing repair than, say, **KLEENMAID**, we can't say for sure that **MIELE** dishwashers are more reliable — their black bars overlap.

On the other hand, we're confident that **MIELE** dishwashers are more reliable than all the brands listed below **KLEENMAID** because their black bars don't overlap the **MIELE** one at all.

Loyalty

The second graph tells you what percentage of survey participants would buy the same brand again. It doesn't always reflect the reliability results because there's more to brand loyalty than the products' reliability.

KITCHEN

Microwave ovens

The survey included all sizes and models, with or without turntables and browners, and also combination convection ovens.

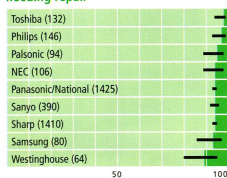
The brands are close together for reliability, and brand loyalty is generally very high.

Blown oven lights caused the most problems. Only 6% of microwave ovens had needed repair during the 12 months before the survey, with the average cost of repair being \$93.

■ Age of the products: 37% 0-5 years, 39% 6-10 years, 25% over 10 years.

■ See page 42 for the latest CHOICE test.

Percentage of microwave ovens not needing repair



Percentage who would buy the same brand of microwave oven again

Panasonic/National (1415)	98
Sharp (1409)	98
Samsung (78)	95
Toshiba (134)	95
Palsonic (95)	94
Sanyo (383)	94
Philips (144)	93
NEC (104)	91
Westinghouse (65)	91



Electric ranges

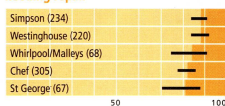
Reliability across the brands is pretty even, with cooking elements causing the most problems. About

one in seven electric ranges had needed repair during the 12 months before the survey, with the average repair cost being \$106.

■ Age of the products: 31% 0-5 years, 24% 6-10 years, 45% over 10 years.

■ The last CHOICE test: March 1997, eight models from \$859 to \$1249.

Percentage of electric ranges not needing repair



Percentage who would buy the same brand of electric range again

St George (68)	87
Westinghouse (222)	87
Chef (320)	80
Simpson (237)	80
Whirlpool/Malloys (70)	73



Refrigerators

The survey included all sizes apart from bar fridges, and all types (frost-free, cyclic defrost, manual defrost).

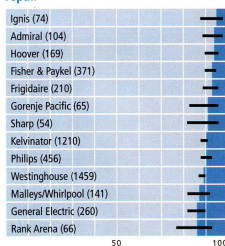
Again, the brands don't differ much in reliability, but we found big differences in brand loyalty. While FISHER & PAYKEL, KELVINATOR, WESTINGHOUSE and SHARP were very popular, owners of RANK ARENA fridges were particularly dissatisfied. GORENJE PACIFIC, IGNIS and PHILIPS fridges were also less likely to be bought again.

The door seal caused the most problems. One in 10 fridges had needed repair during the 12 months before the survey, with the average repair cost being \$132.

■ Age of the products: 40% 0-5 years, 27% 6-10 years, 33% over 10 years.

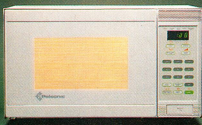
■ See page 14 for the latest CHOICE test.

Percentage of fridges not needing repair



Percentage who would buy the same brand of fridge again

Fisher & Paykel (374)	94
Kelvinator (1229)	92
Westinghouse (1466)	92
Sharp (53)	91
Frigidaire (212)	89
Hoover (167)	89
Malloys/Whirlpool (141)	86
Admiral (106)	85
General Electric (268)	85
Philips (467)	79
Ignis (77)	78
Gorenje Pacific (66)	73
Rank Arena (68)	57



Dishwashers

MIELE tops the list for dishwasher reliability, closely followed by FISHER & PAYKEL and BOSCH. Although ASKO/ASEA models rated comparatively badly, the brand seems very popular among its owners: 92% would buy it again.

MIELE and FISHER & PAYKEL also have loyal customers, while quite a lot of SIMPSON, GENERAL ELECTRIC and HOOVER owners wouldn't buy a dishwasher of the same brand again.

The controls/switches and the door springs, hinges and latches caused the most problems. About one in five dishwashers had needed repair during the 12 months before the survey, with average repair costs being \$113.

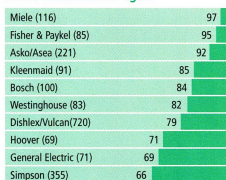
■ Age of the products: 46% 0-5 years, 29% 6-10 years, 26% over 10 years.

■ The last CHOICE test: April 1995, 13 models from \$800 to \$1700.

Percentage of dishwashers not needing repair



Percentage who would buy the same brand of dishwasher again



Electric wall ovens

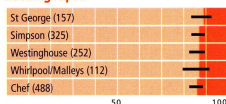
As with electric ranges, reliability between brands is close. The main problems were blown oven lights, damaged door seals and timers. About one in seven electric wall ovens had needed repair during the 12 months before the survey, with the average cost of repair being \$112.

■ Age of the products: 42% 0-5 years, 29% 6-10 years, 29% over 10 years.

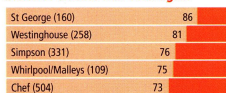
■ The last CHOICE test: February 1996, six models from \$850 to \$1450.



Percentage of electric wall ovens not needing repair



Percentage who would buy the same brand of electric wall oven again



COOLING

Air conditioners

The survey included room units and split and ducted systems. Two thirds of the responses were for room units.

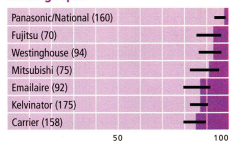
PANASONIC/NATIONAL models are clearly more reliable than those from CARRIER, KELVINATOR and EMAILAIRE, and — together with MITSUBISHI air conditioners — are the most popular with their owners.

The compressor, leaking gas and the thermostat caused the most problems. About one in nine air conditioners had needed repair during the 12 months before the survey, with the average repair cost being \$182 — by far the highest of all products surveyed.

■ Age of the products: 46% 0-5 years, 21% 6-10 years, 33% over 10 years.

■ The last CHOICE test: November 1995, 14 room models under 3 kW from \$700 to \$1075.

Percentage of air conditioners not needing repair



Percentage who would buy the same brand of air conditioner again



HEATING

Electric heaters

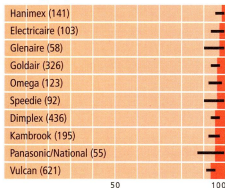
The survey included fan heaters (nearly half of the responses), oil-filled column heaters (about one third) and radiant heaters (about one fifth).

Brand reliability is close. Electric heaters were the most reliable product in the survey, with only one in 20 needing repairs in the 12 months before the survey (with an average cost of \$59). However, this figure may be hiding the fact that for small fan heaters and radiators, it's likely to be cheaper to replace them than have them repaired.

■ Age of the products: 44% 0-5 years, 27% 6-10 years, 29% over 10 years.

■ The last CHOICE tests: May 1997, seven electric oil-filled column heaters from \$189 to \$329. June 1995, nine electric convection heaters from \$99 to \$399. June 1994, 13 fan heaters with thermostat from \$40 to \$94.

Percentage of electric heaters not needing repair



Percentage who would buy the same brand of electric heater again

Panasonic/National (54)	93
Dimplex (431)	92
Electraire (101)	92
Glenaire (56)	91
Omega (124)	90
Goldair (333)	88
Kambrook (196)	87
Vulcan (627)	87
Hanimex (142)	85
Speedie (91)	82

ENTERTAINMENT

TVs

While the survey included all sizes, over half of the responses were for 48-51 cm models.

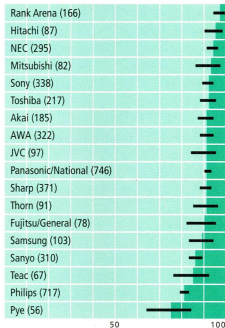
Almost every owner of a JVC or SONY TV would buy the same brand again, while PYE, TEAC, FUJITSU/GENERAL, THORN, RANK ARENA and AKAI models are much less popular with their owners.

Problems with the picture were the most common. About one in nine TVs had needed repair during the 12 months before the survey, with the average repair cost being \$101.

■ Age of the products: 44% 0-5 years, 25% 6-10 years, 31% over 10 years.

■ The last CHOICE test: January 1997, ten 68 cm models from \$1250 to \$1675.

Percentage of TVs not needing repair



Percentage who would buy the same brand of TV again

JVC (106)	99
Sony (359)	99
Panasonic/National (766)	96
Sharp (383)	96
Mitsubishi (82)	94
NEC (317)	94
AWA (333)	93
Philips (739)	92
Sanyo (315)	92
Hitachi (91)	90
Toshiba (225)	88
Samsung (104)	87
Akai (184)	81
Rank Arena (165)	79
Thorn (94)	78
Fujitsu/General (77)	74
Teac (70)	74
Pye (57)	68



CD players (not portable)

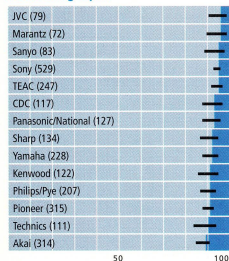
JVC's, SONY's and PANASONIC/NATIONAL's reliability is reflected in their high brand loyalty, while AKAI and PHILIPS/PYE got relatively low loyalty scores.

Playing faults (such as a defective loading mechanism, skipping and jumping) caused the most problems. Only 8% of CD players had needed repair during the 12 months before the survey, with repairs costing an average of \$119.

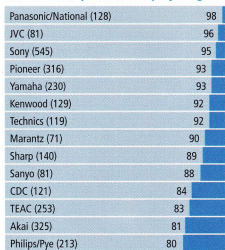
■ Age of the products: 66% 0-5 years, 31% 6-10 years, 3% over 10 years.

■ The last CHOICE test: March 1996, nine multi-disc models from \$400 to \$500.

Percentage of non-portable CD players not needing repair



Percentage who would buy the same brand of non-portable CD player again



Portable CD players

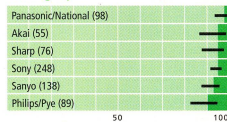
Brand reliability is close, but as with non-portable CD players, PHILIPS/PYE and AKAI models are less popular with their owners than CD players of other brands.

Playing faults (such as a defective loading mechanism, skipping and jumping) caused the most problems. Only 6% of portable CD players had needed repair during the 12 months before the survey, with the average cost of repair being \$87.

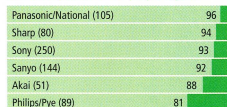
■ Age of the products: 86% 0-5 years, 13% 6-10 years, 1% over 10 years.

■ The last CHOICE test: March 1995, nine models from \$190 to \$690.

Percentage of portable CD players not needing repair



Percentage who would buy the same brand of portable CD player again



VCRs

While the survey included all types of VCR, about one third of the responses were for hi-fi models.

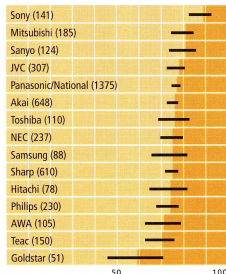
SONY VCRs top the list for reliability, and a very high percentage of owners would buy SONY again. TEAC and GOLDSTAR are at the bottom of both the reliability and the loyalty tables.

Dirty heads caused the most problems. Almost one in four VCRs had needed repair during the 12 months before the survey — a very poor record — with the average cost of repair being \$98.

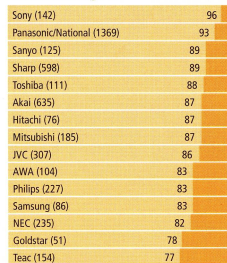
■ Age of the products: 58% 0-5 years, 33% 6-10 years, 10% over 10 years.

■ The last CHOICE test: May 1997, 12 hi-fi models between \$599 and \$799.

Percentage of VCRs not needing repair



Percentage who would buy the same brand of VCR again



OUTDOOR

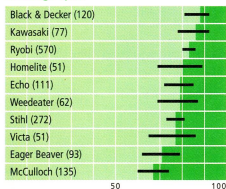
Petrol lawn trimmers

There's quite a spread of reliability between the best and worst brands, with the brands at the bottom of the list — McCULLOCH and EAGER BEAVER (which is owned by McCULLOCH) — also earning a low loyalty rating. Only WEEDEATER trimmers are less popular with their owners.

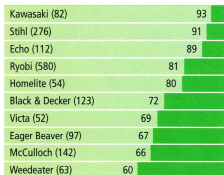
The linefeed mechanism and starting caused the most problems. One in five petrol lawn trimmers had needed repair during the 12 months before the survey, with the average repair cost being \$63.

- Age of the products: 65% 0-5 years, 28% 6-10 years, 8% over 10 years.
- The last CHOICE test: January 1997, 12 models from \$170 to \$250.

Percentage of petrol lawn trimmers not needing repair



Percentage who would buy the same brand of petrol lawn trimmer again



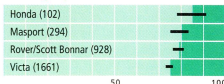
Petrol lawnmowers

Although there's a noticeable reliability gap between HONDA and VICTA, there's surprisingly little difference in brand loyalty.

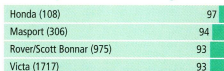
The starting mechanism and the fuel system caused the most problems. Almost one in four petrol lawnmowers had needed repair during the 12 months before the survey (making them, with VCRs, the equal worst appliance for reliability), with the average cost of repair being \$77.

- Age of the products: 41% 0-5 years, 28% 6-10 years, 30% over 10 years.
- The last CHOICE test: November 1993, 10 models from \$399 to \$499.

Percentage of petrol lawnmowers not needing repair



Percentage who would buy the same brand of petrol lawnmower again



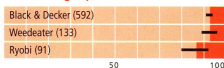
Electric lawn trimmers

Brand reliability is fairly close, and brand loyalty generally relatively low.

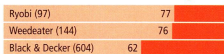
The linefeed mechanism caused by far the most problems. Only 9% of electric lawn trimmers had been repaired during the 12 months before the survey, with the average cost of repair being \$60.

- Age of the products: 62% 0-5 years, 27% 6-10 years, 11% over 10 years.
- The last CHOICE test: October 1994, 12 models from \$70 to \$145.

Percentage of electric lawn trimmers not needing repair



Percentage who would buy the same brand of electric lawn trimmer again



CLEANING

Vacuum cleaners

The survey included all types of vacuum cleaner. Half of the responses were for barrel cleaners, about a quarter for up-rights and 11% for canister cleaners.

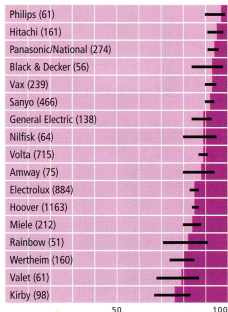
The big finding here is that the very expensive KIRBY vacuum cleaners are at the bottom of both tables. And contrary to what they sometimes claim in their sales pitch, CHOICE has never recommended them.

Broken hoses and suction defects caused the most problems. About one in eight vacuum cleaners had needed repair during the 12 months before the survey, with the average cost of repair being \$71.

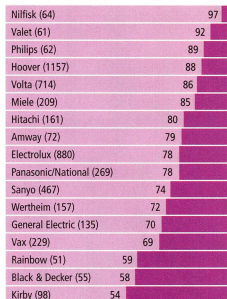
■ Age of the products: 56% 0-5 years, 27% 6-10 years, 17% over 10 years.

■ The last CHOICE test: July 1995, 18 barrel, upright and canister models from \$159 to \$329.

Percentage of vacuum cleaners not needing repair



Percentage who would buy the same brand of vacuum cleaner again



Washing machines

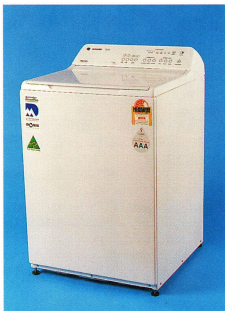
The survey covered all types and sizes, with 85% of responses being for top loaders.

KLEENMAID and FISHER & PAYKEL are a lot more reliable than the other brands, and — together with HITACHI — are also the most popular brands with their owners. GORENJE PACIFIC washing machines, on the other hand, have dissatisfied quite a number of their owners — perhaps not surprisingly, given their poor reliability score: about a third had had to be repaired.

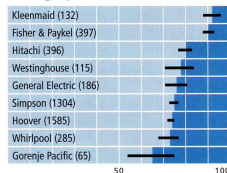
Being out of balance was the most common problem. Almost one in four washing machines had needed repair during the 12 months before the survey (another poor reliability record), and the average cost of repair was \$118.

■ Age of the products: 45% 0-5 years, 30% 6-10 years, 25% over 10 years.

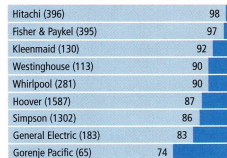
■ The last CHOICE test: April 1997, 15 models from \$1145 to \$1999.



Percentage of washing machines not needing repair



Percentage who would buy the same brand of washing machine again



The big-name fridges all do their job well, so choosing a fridge basically comes down to deciding which particular aspects of performance and usage are important to you.



400 L fridges

IN BRIEF

- A bigger price tag doesn't necessarily mean better cooling performance or features.
- Frost-free fridges are now comparable with cyclic-defrost fridges in terms of cost and energy efficiency, but without the defrosting hassles.
- The energy efficiency of a fridge can dramatically affect its long-term cost.

THE 400 LITRE FRIDGE IS AUSTRALIA'S MOST popular size, just right for the average family. When we went out shopping to see what's on offer, we found about 40 different models around this size on the market — a daunting prospect if you're buying a new fridge.

We put 11 of them, ranging from 380 to 423 litres, to the test. The models tested represent a range of popular brands and include both cyclic-defrost and frost-free models. Where possible, we purchased a model with a bottom-mounted freezer (the so-called 'upside-down' fridge), because although the conventional top-mounted freezer is more popular at the moment, the sales share of fridges with a bottom-mounted freezer is steadily increasing as people recognise their advantages — see *What to look for*, right.

New tests

We introduced new tests this time to provide information on fresh-food compartment cooling rates and crisper effectiveness.

■ Cooling rates

Previous tests have shown that all fridges these days freeze food in an acceptably fast — and therefore

safe — time, so our old test of freezer cooling rates doesn't really differentiate the models any more.

So this time we've compared how long you'd have to wait for the drinks to get cold. The new test measures the rate at which the fresh-food compartment chills a load of shopping from room temperature down to an acceptably cool temperature.

We found that cooling times not only varied between models, but also depended on where in the fridge the measurements were taken. Averaged over the whole fridge, the cooling times ranged from around four and a half hours (WESTINGHOUSE RB411Q-R) to six and a half (HOOVER HE423UF). But if you have a frost-free model and can't wait to get stuck into the chardonnay, you should place it next to the cold-air outlets, usually near the top shelf.

Some fridges (such as the KELVINATOR NB400D-R and the SAMSUNG SRG-V43) have a special chilling compartment, while others (such as the WESTINGHOUSE BJ414Q-R) have a chilling zone — a zone within the fresh food compartment where food will cool down faster.

■ Crisper effectiveness

The crisper is intended to keep food fresh, particularly fruit and vegetables, by protecting it from the

dehydrating effects of the refrigeration process. So we compared water loss from the crisper drawer with that from the main food compartment.

In our test, models with close-fitting crisper drawers (such as the FISHER & PAYKEL models) lost a lot less water than those with a big gap between the top of the drawer and the bottom shelf (such as the HOOVER HE383TF, which was as bad for dehydration in the crisper as in the main fridge compartment).

You can take simple measures to keep fruit and vegetables fresh — put food in plastic bags or airtight containers, for instance, to decrease the effect of dehydration. That's why we didn't give crisper effectiveness a very high weighting in our performance ratings (see the table on pages 18 and 19).

Energy efficiency

Energy efficiency — or rather inefficiency — can contribute substantially to the cost of a fridge. A cheap fridge with high running costs may negate any initial savings over its lifetime. Buying a more expensive fridge with good energy efficiency could prove the better investment in the long term.

Of the models in our *What to buy* list, the SAMSUNG and WESTINGHOUSE RB411Q-R were both reasonably priced and very energy-efficient, making them a good buy on both counts. The FISHER & PAYKEL C420T isn't far behind them, though costs slightly more to run. On the other hand, one of the mid-priced fridges, the KELVINATOR NB400D-R, consumes so much power that it becomes more costly over time than the fridge that's most expensive to buy.

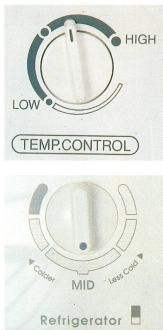
WHAT TO BUY

FISHER & PAYKEL C420T Softline	\$1199
HOOVER HE423UF Contour	\$1495
SAMSUNG SRG-V43 Cool Tech Type A	\$1249
WESTINGHOUSE RB411Q-R Freestyle	\$1199

The FISHER & PAYKEL C420T Softline was one of the cheapest fridges, did very well in the crisper effectiveness tests and has good storage versatility. The HOOVER HE423UF Contour was the best fridge in terms of ease of use, but lost points for a slow cooling rate — it was the slowest of all the models we tested. The SAMSUNG is frost-free, with thoughtful features such as a chiller compartment, an ice-cube dispenser and a huge crisper drawer (which could hold a 10 kg watermelon!). On the downside, the controls were difficult to understand, and the manual added little to enlightenment. The WESTINGHOUSE RB411Q-R Freestyle was by far the best for cooling performance, but was considered difficult to clean, bringing down its total score.

WHAT TO LOOK FOR

- A fridge needs a few centimetres of **airspace** around it, so don't forget to take this into consideration — measure the space you have available in the kitchen. Brochures in the shop or the fridge's manual will tell you how much you should allow.
- Do you want a **cyclic-defrost or frost-free** model? These days you can buy a good frost-free fridge for a comparable price to a cyclic-defrost, and of course their great advantage is that you don't have to defrost them. Their energy efficiency is comparable, but with a build-up of ice and frost, the cyclic-defrost model starts to fall behind.
- Would you prefer to have the **freezer at the top or bottom**? Most people use the fresh food compartment much more often than the freezer, so having it on top improves accessibility. Bottom-mounted freezers also tend to have drawers instead of shelves, making contents easy to get at.
- Check the **energy efficiency** — the more stars the better. Consider **potential running costs** as part of the overall cost of the fridge.
- Which way does the **door open** (many fridges are available with both right- and left-opening doors), and can it be changed later, if you move house, say? Can you do it yourself, or do you need to make a service call?
- Do the **handles** allow easy door opening and closing? Elderly people and those with arthritis may have difficulty with some modern 'groove' handles. And make sure they're not too high or too low.
- Check that the **shelves (and door shelves)** are easy to remove and replace, and that the shelf positions suit your needs.
- Some shelves are made from **solid plastic**, which helps confine spills, although may create extra cleaning.
- If the fridge has to be positioned with the **door hinge next to a wall**, shelves should be removable with the door open at only 90 degrees.
- Think about what **features** — such as butter conditioner, icecube dispenser, storage compartments and chiller zone — would be useful to you.
- **Rollers** are useful for easy moving — when cleaning behind the fridge, for example — and should be adjustable for levelling the fridge. Four rollers are better than two, and brakes on the rollers can help stability.
- Look for smooth, **easy to clean** surfaces with no awkward corners or dirt-trapping crevices, and preferably concealed condenser coils.



On the Samsung's control knob (top), does 'high' mean colder or warmer? The Westinghouse controls (bottom) are much easier to understand.

The Fisher & Paykel N395B's crisper gave the best result in the test for crisper effectiveness — the lettuce on the left was in the crisper for the same length of time as the one on the right was in the fresh-food compartment (both unwrapped): quite a difference.



PROFILES

The fridges are profiled in rank order, from left to right. Prices shown are a good target to aim for when shopping around, based on nationwide checks in February and March 1997. Anything lower is a bargain.

FISHER & PAYKEL C420T SOFTLINE



Target price:
\$1199.

- Cyclic defrost.
- Freezer on top.
- Door opening direction can be reversed after

purchase, though it's recommended you have a serviceperson do this.

Good points

- Good crisper performance in freshness test.
- Good shelf storage space and versatility in fresh-food compartment and door.
- Four rollers with front brakes.

Bad points

- None to mention.

HOOVER HE423UF CONTOUR



Target price:
\$1495.

- Frost-free.
- Freezer underneath.
- Available with doors hinged on left or right side, but this

can't be changed after purchase.

Good points

- Crisp storage space with versatile shelving in fresh-food compartment.
- Good lighting.
- Dual controls for fridge and freezer, which allows you (with a bit of experience) to optimise the temperature of both for your needs.
- Four rollers with front brakes.

Bad points

- Slowest cooling time of all the models tested.

SAMSUNG SRG-V43 COOL TECH TYPE A



Target price:
\$1249.

- Frost-free.
- Freezer on top.
- Available only with the doors hinged on the right.

Good points

- Separate chiller compartment.
- Big, deep crisper.
- Fridge shelves slide forward, improving access, and the fridge is quite shallow, making it easy to reach to the back.
- Best for ease of cleaning.
- Dual controls for fridge and freezer.

Bad points

- Only two rear rollers, making it hard to move.
- Instructions for controls are hard to understand.

WESTINGHOUSE BJ414Q-F FREESTYLE



Target price:
\$1465.

- Frost-free.
- Freezer underneath.
- Available with doors hinged on left or right side, but this

can't be changed after purchase.

Good points

- Good storage space.
- Cooler zone on top shelf for rapid chilling (although anything left there for too long may freeze).
- Separate controls for fridge and freezer.
- Four rollers.

Bad points

- It's easy to jam your fingers between the fridge and freezer handles.
- The door handles are very low.

HOOVER HE410TC CONTOUR



Target price:
\$1049.

- Cyclic defrost.
- Freezer on top.
- Available with doors hinged on left or right side, but

this can't be changed after purchase.

Good points

- Cheapest fridge in the test to buy (but not the cheapest overall when you take running costs into account).
- Good cooling time.
- Good performance in crisper freshness test.

Bad points

- Crisps were too short to fit a bunch of celery, and too shallow to fit a head of lettuce.
- Very basic door shelves with limited versatility
- Exposed condenser coils at the back make cleaning harder.
- Only two rear rollers, making it hard to move.

KELVINATOR CB400D-R IMPRESSION SERIES



Target price:
\$1075.

- Cyclic defrost.
- Freezer underneath.
- Available with doors hinged on left or right side, but

this can't be changed after purchase.

Good points

- Rated second-highest for performance, with particularly good scores for crisper freshness and energy efficiency.
- Cheap both to buy and run.
- Four rollers.

Bad points

- Scored lowest for ease of use, mainly because it was difficult to clean, with many small grooves, and fixed evaporator coils as freezer shelves.
- Limited shelving in fresh-food compartment.
- Only one freezer drawer.
- Split crisper drawers are small, not very deep, and waste a lot of space.
- Limited versatility of door shelves.

WESTINGHOUSE RB411Q-R FREESTYLE



Target price:
\$1199.

- Cyclic defrost.
- Freezer underneath.
- Available with doors hinged on left or right side, but

this can't be changed after purchase.

Good points

- Best score for performance; it was the fastest by over half an hour in the cooling test, and also did well for energy efficiency and crisper freshness.
- Good storage space and versatility.
- Four rollers.

Bad points

- It's possible to jam your fingers between the fridge and freezer handles.
- The door handles are very low.
- Difficult to clean, with many small grooves and a fixed evaporator coil as a freezer shelf.

HOOVER HE383TF CONTOUR



Target price:
\$1259.

- Frost-free.
- Freezer on top.
- Available with doors hinged on left or right side, but this

can't be changed after purchase.

Good points

- Lowest energy usage (and therefore running costs) of all the models tested.
- Spacious shelves and good versatility.
- Dual controls for fridge and freezer.
- Four rollers with brakes at the front, and easy to move.

Bad points

- Poor performance for crisper freshness.
- Limited door storage and versatility.

FISHER & PAYKEL N395B SOFTLINE



Target price:
\$1429.

- Frost-free.
- Freezer underneath.
- Door opening direction can be reversed after purchase,

though it's recommended you have a serviceperson do this.

Good points

- Excellent crisper performance in freshness tests.
- Four rollers with front brakes.

Bad points

- Has split crisper drawers in which long items, such as celery, won't fit.

KELVINATOR NB400D-R IMPRESSION SERIES



Target price:
\$1350.

- Frost-free.
- Freezer underneath.
- Available with doors hinged on left or right side, but this

can't be changed after purchase.

Good points

- Chiller compartment with easy-access drawer.
- Separate controls for fridge, freezer and chiller compartment.
- Four rollers.

Bad points

- Poor energy efficiency and so high running costs.
- Split crisper drawers are small, not very deep, and waste a lot of space.

KELVINATOR NB380D-R IMPRESSION SERIES



Target price:
\$1329.

- Frost-free.
- Freezer underneath.
- Available with doors hinged on left or right side, but this

can't be changed after purchase.

Good points

- Separate controls for fridge and freezer.
- Four rollers.

Bad points

- Poor energy efficiency and high running costs.
- Small and shallow crisper drawers — see right.



You can't fit a great deal into the Kelvinator NB380D-R's small crisper drawers.

400 L FRIDGES

1

2

2

Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price (\$)*	Warranty (years)	Measured dimensions (HxWxD, cm)	Freezer location	Defrost system	Total gross volume (L)	Gross volume fresh food (L)
FISHER & PAYKEL C420T Softline	Fisher & Paykel	Australia	1199	1 (A)	168 x 64 x 67	Top	Cyclic	412	314
HOOVER HE423UF Contour	Southcorp	Australia	1495	2 (B)	171 x 68 x 66	Bottom	Frost-free	423	281
SAMSUNG SRG-V43 Cool Tech Type A	Samsung	Korea	1249	2 (C)	175 x 67 x 66	Top	Frost-free	390 (A)	265 (A)
WESTINGHOUSE RB411Q-R Freestyle	Email	Australia	1199	1 (D)	168 x 69 x 73	Bottom	Cyclic	410	266
HOOVER HE383TF Contour	Southcorp	Australia	1259	2 (B)	157 x 68 x 66	Top	Frost-free	383	282
FISHER & PAYKEL N395B Softline	Fisher & Paykel	Australia	1429	1 (A)	168 x 63 x 67	Bottom	Frost-free	397	260
WESTINGHOUSE BJ414Q-R Freestyle	Email	Australia	1465	1 (D)	168 x 69 x 71	Bottom	Frost-free	410	255
HOOVER HE410TC Contour	Southcorp	Australia	1049	2 (B)	164 x 69 x 69	Top	Cyclic	410	309
KELVINATOR CB400D-R Impression Series	Email	Australia	1075	1 (E)	166 x 64 x 73	Bottom	Cyclic	396	258
KELVINATOR NB400D-R Impression Series	Email	Australia	1350	1 (E)	165 x 64 x 73	Bottom	Frost-free	396	265
KELVINATOR NB380D-R Impression Series	Email	Australia	1329	1 (F)	160 x 64 x 71	Bottom	Frost-free	380	245

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in February and March 1997.

- (A) Repair or replace; five years' parts and labour on sealed system. An extra 12-month free service warranty is available if you register by mail.
 (B) Parts and labour; plus additional three years parts on sealed system.
 (C) Parts and labour; plus three years parts on sealed unit.
 (D) Repair or replace plus the following four years on sealed refrigeration system parts. An extra 12-month parts and labour warranty on the whole fridge is available if you register your warranty by phone.
 (E) Repair or replace plus the next four years on sealed refrigeration system parts, \$150 for damage to frozen food due to refrigeration system breakdown for the first 12 months.
 (F) Repair or replace plus the next four years on sealed refrigeration system parts, five years on total surface rust, \$150 for damage to frozen food due to refrigeration system breakdown for the first 12 months.
 (G) The fridge we bought was labelled as 420 L. However, Samsung says this was in error, and the total gross volume is in fact 390 L. Samsung says it's correcting the label.

How reliable are they?

We surveyed a sample of our subscribers about the reliability of their fridges, asking whether they had needed repair in the previous 12 months.

The results are given on the right for brands for which we had more than 50 responses; the number in brackets is the number of fridges of a particular brand reported on by subscribers in the survey.

On average, only about 10% of the fridges had needed repair during the previous 12 months — making them generally a very reliable appliance — at an average cost of around \$132.

Note that the results of the survey are for fridges of all brands and models (except for bar fridges), not just those included in this test.

Percentage not needing repair

Ignis (74)	95
Admiral (104)	94
Hoover (169)	94
Fisher & Paykel (371)	93
Frigidaire (210)	93
Gorenje Pacific (65)	91
Sharp (54)	91
Kelvinator (1210)	90
Phillips (456)	90
Westinghouse (1459)	89
Malleys/Whirlpool (141)	87
General Electric (260)	86
Rank Arena (66)	86

Percentage who would buy the same brand again

Fisher & Paykel (374)	94
Kelvinator (1229)	92
Westinghouse (1466)	92
Sharp (53)	91
Frigidaire (212)	89
Hoover (167)	89
Malleys/Whirlpool (141)	86
Admiral (106)	85
General Electric (268)	85
Phillips (467)	79
Ignis (77)	78
Gorenje Pacific (66)	73
Rank Arena (68)	57

Recycling fridges

These days all new fridges must be free of CFCs, which are ozone-depleting gases. But disposal of old fridges — which may have CFCs in the cooling system and insulation — still poses a problem.

In Australia, it is not mandatory to remove CFCs from old fridges before disposal, although it's encouraged. The reasoning goes like this: old fridges are usually thrown out because they don't work properly, and the reason they don't work properly is because the refrigerant gases (the CFCs) have diminished (through leakage or broken tubing). So the amount remaining is not enough to worry about.

If you do want to get the CFCs removed, you must get a fridge mechanic qualified to do so. And of course you pay for it!

There are several different metals in fridges and these are recycled by scrap metal merchants. They shred the fridge and separate the metals from the plastics, which are thrown away. Email makes the effort of marking its plastics for separation and recycling — but apparently to no avail.

CHOICE would like to see manufacturers take responsibility for the lifecycle of their products. In this case, we'd like them to take back the fridges at the end of their useful lives for dismantling, with the parts being reused and recycled as much as possible.

While this is done in many European countries, Email argues that Australia's large size and low population density, with the corresponding low volumes and high transport costs, make this sort of service unlikely to happen here. Fisher & Paykel, however, is piloting a recycle and reuse scheme in New Zealand, and says it might eventually be introduced here.

2	3	4	5	6	7	8	9	10		
Gross volume freezer (L)	Noise (dB)	Star rating	Energy use (kWh/year)	10-year running costs (\$)	Cooling time	Performance score (%)	Ease of use score (%)	Overall score (%)	Brand / model (in rank order)	
96	39	4	770	924	6 hr 9 min	72	74	73	FISHER & PAYKEL C420T Softline	
142	43	5	715	858	6 hr 41 min	69	77	73	HOOVER HE423UF Contour	equal
122 (6)	39	4	707	848	6 hr 24 min	69	77	73	SAMSUNG SRG-V43 Cool Tech Type A	
142	36	5	700	840	4 hr 40 min	81	65	73	WESTINGHOUSE RB411Q-R Freestyle	
101	43	5	630	756	6 hr 2 min	69	70	70	HOOVER HE383TF Contour	
141	38	4	950	1140	6 hr 9 min	67	71	69	FISHER & PAYKEL N395B Softline	
150	37	4	990	1188	6 hr 2 min	65	71	68	WESTINGHOUSE BJ414Q-R Freestyle	
96	41	4	920	1104	5 hr 14 min	72	61	67	HOOVER HE410TC Contour	
133	39	5	680	816	5 hr 43 min	76	58	67	KELVINATOR CB400D-R Impression Series	equal
135	39	3	1150	1380	5 hr 40 min	62	71	67	KELVINATOR NB400D-R Impression Series	
135	40	3	1140	1368	5 hr 30 min	63	64	63	KELVINATOR NB380D-R Impression Series	

1 Freezer location

The freezer can be above or below the fresh-food compartment. See *What to look for* on page 15 for the advantages of having the freezer at the bottom.

2 Gross volume

Some of these volumes were provided by the manufacturer; where they weren't we measured them. The fresh-food and freezer compartment volumes don't always add up exactly to the total because of unusable crannies and crevices. Use the volumes to get an idea of which models have a bigger or smaller freezer, which might help you choose a model, depending on your freezer vs fresh-food needs.

3 Noise

Noise levels were measured in our lab quite close to the fridges. In your kitchen they may sound quieter, but comparatively the same ones will be loudest. All the models are in fact fairly quiet.

4 Star rating

The star ratings for energy efficiency are based on the energy used per litre of fridge space per day. The more stars the better, with six the highest number possible. Three is a pretty poor rating these days.

5 Energy use

This is a calculation of how much energy the fridge uses in a year to maintain a temperature of 3°C in the fresh food compartment and -15°C in the freezer, when operated at a room temperature of 32°C.

6 Running costs over 10 years

The running cost is calculated from the energy used over 10 years, using a rate of 12 cents per kilowatt hour. A 10-year period provides a

useful indication of the long-term differences between high and low energy usage — and you can expect your fridge to last at least that long.

7 Cooling time

This is the time taken to cool the equivalent of an 8 kg load of shopping from around 24°C to around 9°C. This temperature is adequate if you're waiting for a cool drink.

8 Performance score

Three factors were included in the performance score, with weightings as follows:

- Energy efficiency (45%).
- Cooling time (45%).
- Crisper freshness (10%).

9 Ease of use score

Our ease of use rating consists of:

- Ease of cleaning — including moving the fridge (30%).
- Ease of storing items of various shapes and sizes; adjustability of the shelves (65%).
- Ease of understanding and operating temperature controls (5%).

10 Overall score

The scores for performance and ease of use each make up half of the overall score.

FOR PEOPLE WITH DISABILITIES

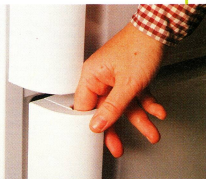
An occupational therapist from the Independent Living Centre evaluated the fridges for potential difficulties. Overall, none of the fridges tested was particularly good for people with a disability.

- Fridges with a freezer on the bottom are generally better for people in a wheelchair. However, the dairy and chiller compartments may be too high.
- None of the fridges has the 'old-fashioned' D-type handles, which are much easier for people with arthritis and lack of hand strength to use. Handles were mostly the recessed ('groove') type, and although the WESTINGHOUSE models had slightly better handles in this respect, several of our ease-of-use testers got their fingers jammed between the fridge and freezer handles.
- Shelves, crisper and freezer drawers which pull out without falling out increase accessibility.

The SAMSUNG has pull-out shelves in the fresh-food compartment, and is also very shallow, making it easy to reach the back. However, it's too high to be practical for wheelchair users.

Most fridges with a bottom-mounted freezer have freezer drawers with a stopper function to prevent them coming out. Freezers with fixed shelves, such as the KELVINATOR CB400D and the WESTINGHOUSE RB411Q, make cleaning and access difficult.

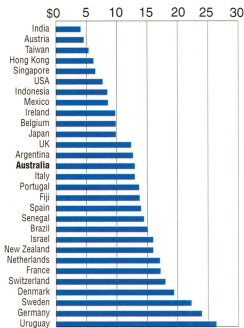
The Westinghouse models have recessed handles that are comparatively easy to use if you lack hand strength — but unfortunately it was very easy to trap your fingers between the fridge and freezer handles.



HOLIDAY SNAPS

Film developing

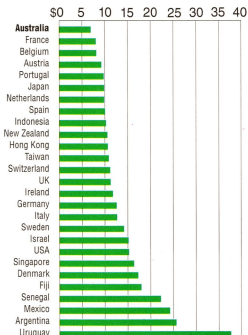
Same-day developing
24 standard-size* prints (35 mm film)



*In most countries standard-size prints measure 10x15 cm; the next most common size is 9x12.5 cm.

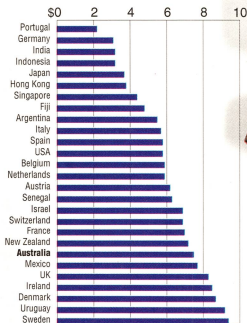
Single-use camera

Fuji Quicksnap (standard)
24 exposures, no flash



Kodak Gold Film

35 mm colour film,
24 exposures, 200 ISO



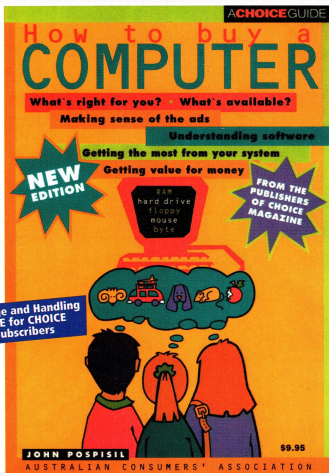
All prices are in Australian dollars, rounded to the nearest 10 cents, based on exchange rates quoted in the *Australian Financial Review*, April 16, 1997. Note that prices are not corrected for or modified by local income levels and are therefore most useful as a gauge of what the Australian dollar will buy in the countries named.

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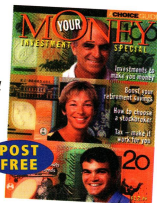


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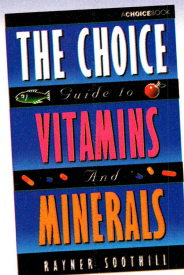
How to Clean Practically Anything provides you with cleaning advice for every part of your home.

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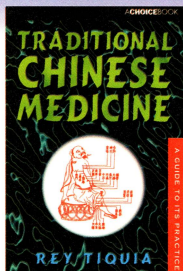
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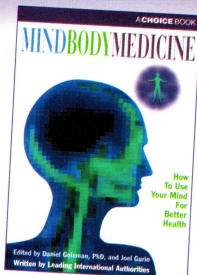
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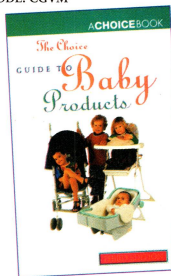
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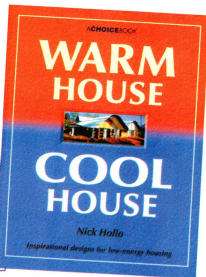
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Four-year INDEX

July 1993 — June 1997

Dates in **bold** type indicate a test report, trial or survey, normal type indicates other articles.
 * indicates update of previous report, additions or corrections to reports, small follow-up items, or letters.
 For space reasons, the index doesn't usually include Choice Cuts, many other small pieces and recalls and bans.

Pull this index out of your copy of CHOICE and keep it as a handy reference.

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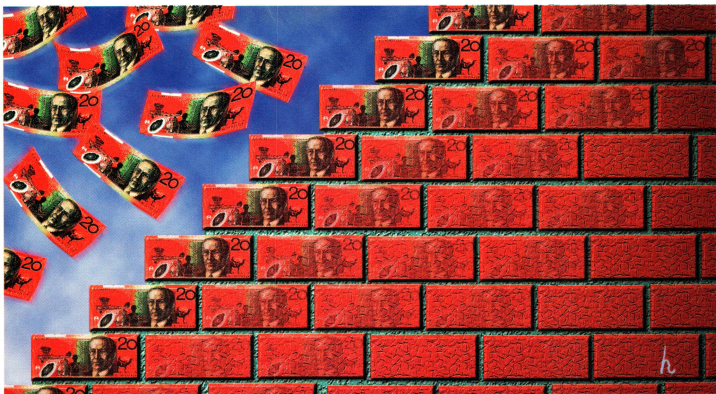
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Home loans

You've probably noticed there's something of a war going on among home loan lenders, which is great news for home buyers. Even if you took out your home loan some time ago, you may want to take a look at the range of options now available, and consider moving your mortgage.

HOME LOANS AREN'T JUST ABOUT signing up for 25 years and making the payments any more — not even just about signing up and then paying a loan off as quickly as possible.

There's a range of options which can save you money, and there are also options which can give you more flexibility or even peace of mind. However, a key feature for most people is still the interest rate. On the following pages we look at your home loan options.

Home loan options

A cut in lender profit margins and cuts in money-market interest rates last year made lower interest rates good news for borrowers. It now means that mortgage interest rates are at their lowest for 20 years — and they're offering an increasing range of options, too.

In the section starting overleaf we tell you about the range of loans available, including some examples from lenders, showing interest rates and features.

IN THIS REPORT

- The different types of home loan, with the pros and cons of each (pages 30 to 33).
- Mortgage features — what's on offer, and what's worth paying for? (Page 35.)
- Mortgage costs — what you really pay (pages 36 to 37).
- The truth about how to save thousands paying off your home loan (page 37.)

Standard variable-rate loans

These have been the most popular type of loan. You borrow the money for a set period of time, during which you make regular repayments. The interest rate (and so your repayments) can vary.

As you can see from Figure 1 on page 34, in the last 10 years borrowers have had to deal with interest rates as high as 17%. Someone who borrowed \$100,000 in 1976, to be paid back in 25 years, would have taken on monthly payments of \$873 a month — but at the beginning of 1990 would have found themselves paying \$1438 a month.

Standard variable-rate loans are generally the most flexible — offering the opportunity to redraw any extra money you've paid in, for example (see *Home loan features* on page 35), and the option to switch to a fixed rate — for three years, say. They also generally have few penalties if you want to pay off the loan early unless you've elected to convert to a fixed rate.

■ **Typical current rates:** 7.3% to 7.99%

■ **Our verdict:** Still the mainstream home loan — but loans with lower interest rates may offer you a better deal.

See Table 1 for some examples.

Honeymoon-rate loans

To attract borrowers, many lenders offer loans with a low rate for (usually) the first year. After this time the loan reverts to the current standard variable rate.

During the honeymoon period interest rates may be fixed, so you know what you'll pay at the outset, or 'capped', in which case if the standard variable rate drops below the honeymoon rate you pay the lower of the two. A \$100,000 loan with a 6.45% honeymoon rate offers a saving of around \$840 in the first year compared to a 7.55% standard variable-rate loan.

The price you pay for this saving is that there are likely to be *exit penalties* if you want, for example,

to pay off the loan or refinance in the first three years (see *Mortgage costs* on page 36).

■ **Typical current rates:** 6.5% to 6.99% for the first year, then the standard variable rate.

■ **Our verdict:** Worth having a low-interest period, but the advantage can be quickly eroded if the institution has a high standard rate after the honeymoon.

Basic variable-rate loans

These are on offer from a growing number of lenders and are basic 'no frills' loans. In return for a lower interest rate than standard variable-rate loans, they offer fewer features — there may not be an offset account or redraw facility, for example (see *Home loan features*).

■ **Typical current rates:** 6.9% to 7.25%

■ **Our verdict:** Great for those who want nothing more than a traditional home loan — regular payments for a fixed period. And some basic loans are now offering a growing range of features.

See Table 2 for some examples.

Fixed-rate loans

The interest rate is fixed for a period, usually between one and five years, after which a new fixed rate can be agreed, or the loan can revert to the lender's standard variable rate.

Having a fixed-rate loan can be wonderful for a borrower if interest rates go up, but very expensive if they go down. You should also read the section on exit penalties (page 36), which can be particularly hefty with fixed-rate loans.

■ **Typical current rates:**

— One-year fixed: 6.25% to 8.25%.

— Three-year fixed: 8.1% to 8.75%.

— Five-year fixed: 8.5% to 9.8%.

Notes on Tables 1 to 3

In these tables we show what's on offer from: the big four banks (ANZ, COMMONWEALTH, NATIONAL AUSTRALIA BANK and WESTPAC); four each of the regional banks and larger building societies and credit unions; and four other institutions (AMP'S PRIORITY ONE, AUSSIE HOME LOANS, FAI and RAMS).

The interest rates and charges, as well as our calculated **average annual percentage rate (AAPR)**, were correct in April.

The AAPR is a calculation which takes the fees and charges into account when calculating the interest rate. It looks at all the costs for a \$100,000 home loan over the first seven years — including interest, establishment and valuation fees and ongoing fees.

This allows us to compare a loan which, for example, has a low interest rate in the first year but high establishment costs, with one which has a higher rate but low fees.



Table 1: Standard variable-rate home loans

Lender / loan (in order of AAPR)	AAPR (%) (A)	Quoted interest rate (%)	Option* to fix rate?	Split fixed / variable rate available? *	Extra payments OK	Offset account? (B)	Redraw facility? (C)	Establishment fee (\$) (D)	Regular fees (yearly cost: \$)	Exit/discharge costs (\$) (E)
FAI HOME LOANS Value Rate	7.41	7.30	✓	✓	✓		✓ \$0	600	0	300 (U)
IMB BS	7.55	7.55	✓		✓	✓ (F)	✓ \$20	0	0	250
ST GEORGE	7.55	7.55	✓	✓	✓	✓ 2.75%	✓ \$15	0	60	175
MLC BS	7.56	7.45		✓	✓		✓ \$10	600	0	285
AMP's PRIORITY ONE All Options	7.58	7.47	✓	✓	✓		✓ \$15	600	0	(K)
AUSSIE HOME LOANS	7.60	7.49	✓	✓	✓		✓ \$0	600	0	650 (L)
RAMS HOME LOANS Better	7.60	7.49	✓	✓	✓		✓ \$0	600	0	495
NAB	7.61	7.55	✓	✓	✓	✓ 4.00%	✓ \$0	0	60	150
AUSTRALIAN CENTRAL CU	7.65	7.55	✓	✓	✓			525	0	137
BANKWEST Bankwise	7.65	7.55	✓		✓	✓ 3.38%	✓ \$0	350	96	235
ANZ	7.66	7.55			✓	✓ 7.55%		600	0	(M)
BANK OF MELBOURNE	7.66	7.55	✓	✓	✓	✓ 2.55%	✓ \$10	600	0	70
ENDEAVOUR CU Choices	7.66	7.55		✓	✓	✓ 4.53%	✓ \$20	600	0	(K)
ENTERPRISE CU Classic	7.66	7.55			✓			594	0	159
COMMONWEALTH Complete	7.70	7.55	✓	✓	✓	✓ 2.75%	✓ \$0	300	96	(N)
HOME BS	7.71	7.55	✓		✓	✓ 3.78%	✓ \$10	450	80	215
METWAY Ready Access	7.72	7.55	✓		✓	✓ 7.55%	✓ \$25	700	36	400 (P)
WESTPAC/CHALLENGE Premium Option	7.76	7.55	✓	✓	✓		✓ \$10	600 (G)	96	150
ISLAND STATE CU	7.88	7.80			✓	✓ 4.68%	3 \$10	800 (H)	0	100
FIRST PROVINCIAL BS	8.10	7.99	✓		✓	✓ 1.50%	✓ \$30	600	0	100

BS Building Society.

CU Credit Union.

* May incur a fee and may not have the same features.

(A) Average annual percentage rate. The AAPR is the calculated interest rate including the establishment and ongoing fees shown. It is calculated for a \$100,000 loan for the first seven years. Loans with a fixed rate are assumed to revert to the variable rate when it expires.

(B) There is a tick if this feature is available. We also show the interest rate applicable with \$5000 in the account.

(C) There is a tick if this feature is available. We also show the associated cost.

(D) This includes the application document, legal and valuation fees.

(E) Our information covers exit fees, but in some cases there may be additional costs, too, as well as government charges (usually \$50 to \$100). Lenders use various

terms to describe these costs; you should check carefully for legal costs, penalties, document handling, settlement fees and duties.

(F) Various accounts available.

(G) \$300 if you have a Classic Plus transaction account and Westpac credit card.

(H) For \$70,000 loan.

(J) For five years, plus solicitor's costs.

(K) May be plus solicitor's fees/registration costs.

(L) For five years, then \$150.

(M) \$90 to lodge documents or \$150 for settlement.

(N) \$100, or \$150 for settlement.

(P) For three years, then \$50.

Table 2: Basic variable-rate home loans

Lender / loan (in order of AAPR)	AAPR (%) (A)	Interest rate (%)	Option* to fix rate	Split fixed / variable rate available*	Extra payments OK	Offset account (B)	Redraw facility (C)	Establishment fee (%) (D)	Regular fees (yearly cost: \$)	Exit/discharge costs (\$) (E)
MLC BS Home Value	7.09	6.95		✓	✓		✓ \$10	750	0	285
COMMONWEALTH Economiser	7.10	6.95	✓		✓	✓ 2.75%		300	96	(G)
ANZ Money Saver	7.11	6.90	✓	✓	✓			600	96	(H)
ENDEAVOUR CU Essentials	7.11	6.90		✓	✓			600	96	(J)
HOME BS No Frills	7.11	6.95	✓		✓ (F)			450	80	215
BANKWEST Budget	7.14	6.95	✓					500	96	235
ST GEORGE Great Australian	7.16	6.95			✓		✓ \$15	600	0	175
WESTPAC/CHALLENGE First Option	7.16	6.95			✓		✓ \$50	600	96	150
METWAY Back to Basics	7.44	7.25	✓			✓ 3.25%		700	60	400

BS Building society.

CU Credit Union.

* May incur a fee and may not have the same features.

(A) to (E) See Table 1.

(F) Within limits.

(G) \$100, or \$150 for settlement.

(H) \$90 to lodge documents or \$150 for settlement.

(J) Plus solicitor's fees/registration costs.

■ **Our verdict:** If interest rates are expected to rise, the fixed rate is likely to be above the variable rate; if the rate is expected to fall, it could be lower. As you can see, at the moment there's generally a price to pay for having a fixed rate, in the form of interest rates higher than the variable ones currently available. See *To fix or not?* on page 34, for more advice.

See Table 3 for some examples.

Split-rate loans

These are loans for which part is treated as a fixed-rate loan (generally fixed for up to five years), and part as a variable-rate one. The option to split a loan like this is a feature of some home loans (see Tables 1 to 3).

■ **Typical current rates:** See standard variable and fixed-rate loans, above.

■ **Our verdict:** If you're worried that interest rates will rise, splitting your loan between fixed and variable rates can offer an element of security (see *To fix or not?*, overleaf).

Equity overdraft loans

These are the most flexible type of home loan. In essence they're home loans from which you can pay money off and draw money out very flexibly — because the mortgage is run like a bank account.

However, there is a price to pay, because interest rates are higher than more traditional home loans. A mortgage like this works like an overdraft, and borrowers will often have the flexibility to choose whether to pay off the loan or just the interest. If you've paid off some of the capital, you may be able to borrow back up to your original limit.

You should aim to put as much of your earnings through the account as possible — because while

the money is in the mortgage account it reduces the amount that's been borrowed, and so the interest charged.

In some cases you can combine the mortgage with a normal transaction account, giving you access to your money using cheques, EFTPOS or an ATM in the usual way — though check transaction fees, which can be high.

These loans are available from a range of institutions. Of the ones in our tables, BANKWEST, COMMONWEALTH, IMB BS, ISLAND STATE CU, METWAY, NATIONAL AUSTRALIA BANK and WESTPAC/CHALLENGE offer cheque, EFTPOS and ATM access with their equity overdraft loans.

■ **Typical current rates:** 8.2% to 9.5% — higher-risk borrowers may pay more. Also watch for highongoing fees.

■ **Our verdict:** It may require considerable self-restraint and determination to stick to a schedule of payments and reduce your loan when you have such easy access to your money, but you've



'NO-FRILLS' LOAN



Michael and Uta bought a unit in November last year. They decided they wanted a low interest rate with the option of making higher repayments than required (see *Save \$'000s*, page 37).

They also saw that rates had been cut just before they took out their loan and decided to fix the interest rate for the first year.

Interest rates have dropped a little further since then, and the fixed rate they chose means they're actually paying about \$35 a month more in interest than they would if they were on the current variable rate. But they have the security of knowing repayments are fixed at a rate they can afford for a year.

Whether a fixed rate is right for you will depend on a lot of things (see *To fix or not?*, on page 33).

Michael and Uta's mortgage costs:

- Their solicitor's fee for dealing with the mortgage: \$150.
- Application fee: \$300.
- Stamp duty: \$421.
- Mortgage registration: \$53.
- **Total set-up costs: \$924.**

also got ready access to a 'cheap' loan, and very flexible payments.

To make the most of this sort of loan, look for an account you can use as your main transaction account, too.

To fix or not?

With many variable-rate loans you can choose to change to a fixed-rate loan if you want to. The best time to do this is likely to be when interest rates are set to increase. Fixing the rate can give you the security that your loan has affordable payments for their period you've chosen — whatever happens to the variable interest rate.

However, when you're choosing whether to fix the rate, you're trying to outguess the professionals. The fixed rate on offer will be one that reflects their estimation of interest rates over the fixed period — you can only be certain of a saving with the benefit of hindsight.

You should also check if there are any restrictions on repayments — you may not be allowed to make extra ones. There may also be fees to pay and other conditions may change.

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Calls to MONEYCHOICES on

1900 17 00 88 cost \$1.95 per minute (more from mobiles and payphones). A typical call costs around \$7. (Data from Cannex; phone service by Broadsystem.)

Table 3: Three-year fixed-rate home loans (other terms generally available)

Lender / loan (in order of AAPR)	AAPR (%) (A)	Current fixed interest rate (%)	Current applicable variable rate (%)	Option to fix rate again	Split fixed / variable rate available	Extra payments during fixed rate OK?	Offset account (B)	Redraw facility (during fixed rate) (C)	Establishment fee (\$) (D)	Regular fees (yearly cost: \$)	Exit/ discharge fees (\$) (E)
AUSSIE HOME LOANS	7.90	8.10	7.49	✓	✓				600	0	650 (J) + (K)
ANZ	7.96	8.15	7.55	✓	✓				600	0	300 (L) + (K)
BANK OF MELBOURNE	7.96	8.15	7.55	✓	✓	✓ (G)	✓ 2.55%		600	0	70 + (K)
MLC BS	7.99	8.25	7.45	✓	✓		✓ 3.75%		750	0	285 + (K)
COMMONWEALTH	8.00	8.15	7.55	✓	✓	✓ (G)	✓ 2.75%		300	96	(M) + (K)
ENDEAVOUR CU	8.01	8.25	7.55	✓	✓	✓ (G)			600	0	300 (N)
IMB BS	8.03	8.35	7.55	✓	✓	✓	✓ (H)	✓ \$20	450	0	200 + (K)
AUSTRALIAN CENTRAL CU	8.05	8.35	7.55	✓	✓	✓ (G)			525	0	137 + (K)
METWAY Control Rate (F)	8.07	8.25	7.55	✓	✓	✓	✓ 3.25%	✓ \$25	700	36	400 + (K)
NAB Tailored	8.07	8.30	7.55	✓	✓	✓	✓ 4.00%		250	96	350 + (K)
FAI HOME LOANS	8.11	8.70	7.30	✓	✓				600	0	300 (P) + (K)
HOME BS	8.14	8.40	7.55	✓		✓ (G)			450	80	215 + (K)
METWAY	8.14	8.40	7.55	✓			✓ 3.25%		700	36	400 + (K)
ST GEORGE	8.15	8.40	7.55	✓	✓	✓	✓ 2.75%	✓ \$15	600	60	(Q)
WESTPAC/CHALLENGE	8.18	8.40	7.55	✓	✓				600	96	150 + (K)
RAMS HOME LOANS	8.26	8.80	7.49	✓	✓				600	0	495 + (K)
FIRST PROVINCIAL BS	8.41	8.60	7.99	✓	✓	✓	✓ 1.5%	✓ \$30	600	0	100 + (K)
BANKWEST	8.42	8.20	8.45	✓			✓ 3.38%		500	0	235 + (K)

BS Building society.

CU Credit union.

(A) to (E) See Table 1.

(F) This loan has a rate which won't go above 9.25% (cap) or below 7.25% (collar) in the three-year period.

(G) Within limits.

(H) Various accounts available.

(J) For five years, then \$150.

(K) Break cost — if the fixed rate you're paying is higher than the current variable rate, some lenders make you pay for all the extra interest they've 'lost' when you pull out early. See page 36 for details.

(L) Plus \$90 to lodge documents or \$150 for settlement.

(M) \$100, or \$150 for settlement.

(N) Plus solicitor's fees and registration costs.

(P) For the first five years, plus solicitor's costs.

(Q) \$175 plus up to three months' interest.



may make sense to fix part or all of your loan, on the premise that they're more likely to go up than even further down — but it's still a gamble. It depends on how the fixed interest rate offered compares with the variable rate you're currently paying.

Currently the extra interest you'd pay to fix your interest for three years is at least 0.5% — a cost of around \$30 a month with a 25-year \$100,000 home loan if variable rates stay as they are. If they go up, you're a winner.

In Figure 1 we show the variable rate and three-year fixed rates from banks. As you can see, the fixed rates are more often higher at the same point in time, and over the period covered (mostly with interest rates dropping), the fixed rate has been a better option for borrowers only about a quarter of the time.

How much you can borrow

When lenders decide how much they're prepared to lend they may look at your pre-tax income, and then choose an amount for which repayments are, say, 30% of your pre-tax income. But there's now a trend to ask for information about your after-tax income too, then to deduct any existing loan costs, other

similar commitments and an allowance for living expenses (for example, \$8800 for a single person, \$13,000 for a couple with \$2500 for the first dependent child and \$1600 for further children).

If what's left will cover the expected loan repayments (perhaps using a 10% interest rate for the calculation to cater for increased rates and a safety margin), the borrower will qualify.

But it's not just qualifying for the loan that's important. You should make your own assessment of whether you can afford it if interest rates go up.

In Table 4 we show you the repayments which would be due per month for each \$1000 borrowed at various interest rates, and over different periods of time. As you can see, if interest rates for a \$100,000 25-year home loan go from 8% to 12%, the monthly payment would go up from \$772 to \$1053.

If interest rates rise, there may be the option of extending the period of the mortgage, rather than increasing payments, though 25 to 30 years is usually the maximum. If you're having difficulties it's certainly something to discuss with the lender.

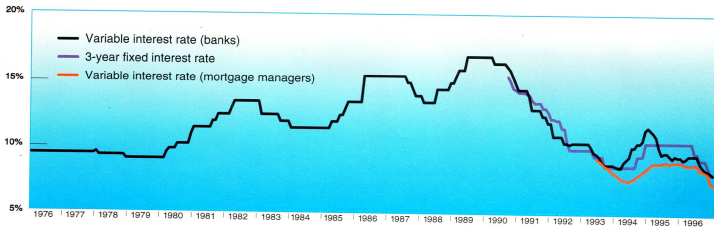
Home loan features

Even with the limited selection of loans in our tables, you could pay interest of between 6.9% and 8.8%, depending on the institution you go to. And these loans come with a range of add-ons — free banking, low-cost loans or credit cards, for example. The lowest-rate mortgages are often those with fewest features — but which ones are worth having?

Extra repayments

Some loans, particularly those with a fixed interest rate, may limit the amount you can pay off your loan. If your main aim is to pay it off as quickly as possible, check to see the ability to make extra payments is a feature of the loan.

Figure 1: 10 years of home loan interest rates



Source: Reserve Bank

Table 4: How much will it cost for each \$1000 borrowed?

Interest rate (%)	TERM OF LOAN				
	5 years monthly payment: \$ (total amount paid: \$)	10 years monthly payment: \$ (total amount paid: \$)	15 years monthly payment: \$ (total amount paid: \$)	20 years monthly payment: \$ (total amount paid: \$)	25 years monthly payment: \$ (total amount paid: \$)
6	19.33 (1160)	11.10 (1332)	8.44 (1519)	7.16 (1719)	6.44 (1933)
7	19.80 (1188)	11.61 (1393)	8.99 (1618)	7.75 (1861)	7.07 (2120)
8	20.28 (1217)	12.13 (1456)	9.56 (1720)	8.36 (2007)	7.72 (2315)
9	20.76 (1246)	12.67 (1520)	10.14 (1826)	9.00 (2159)	8.39 (2518)
10	21.25 (1275)	13.22 (1586)	10.75 (1934)	9.65 (2316)	9.09 (2726)
11	21.74 (1305)	13.78 (1653)	11.37 (2046)	10.32 (2477)	9.80 (2940)
12	22.24 (1335)	14.35 (1722)	12.00 (2160)	11.01 (2643)	10.53 (3160)

Paying an extra 10% each month could knock five or six years off a 25-year mortgage — and therefore save you thousands of dollars.

Redraw facility

With many loans, if you make extra payments you can get the money back later. This can have considerable tax advantages (see *Save \$'000s* on page 37) and provide useful security if you find you need the extra money you've paid in.

Some redraw facilities are much easier to access than others — check whether you'll be required to apply in writing, how long it might take for approval to come through, and the costs, which might be as much as \$50 for each request — we show charges in Tables 1 to 3.

Mortgage offset accounts

Many loans offer mortgage offset accounts. With these, you deposit money in an account and receive interest in the form of a reduction in the interest due on your loan.

Because offset accounts don't actually pay you any money, they don't add to your taxable income — so like redraw facilities they offer tax advantages.

However, not all offset accounts were created equal. For example, if you have savings over \$2000 in the ANZ offset account, the bank will offset the amount of your loan dollar for dollar. Some other accounts just set off the interest due (which may be as low as 0.1% at present) against the interest due on your loan.

Some offset accounts can be used as your everyday transaction account, while others are only suitable for putting your savings into. And in some cases you may be able to have one or more of a range of 'ordinary' accounts linked to your home loan and acting as offset accounts.

In Tables 1 to 3 we show the interest rate offset if you have \$5000 in the account. For more on redraw facilities and offset accounts, see *Getting out of the transaction account trap* in CHOICE, May 1997.

The figures shown above are: first the monthly repayment due for each \$1000 of the loan for it to be repaid at the end of the term, and (in brackets) the total amount which would be paid over the term for each \$1000 borrowed. You can see that the length of the loan as well as the interest rate makes a big difference to the monthly repayment and the total amount paid back.

Mortgage costs

Just as there's a range of options available with home loans, there's also a range of fees. Some are government fees and so unavoidable unless the lender pays them. Others are clearly signposted, but some seem to creep in, and may be easy to miss when doing the sums.

MAKING YOUR MONEY WORK

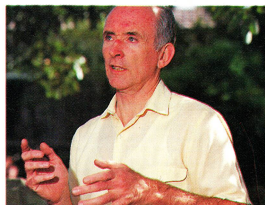
When Robert was looking for a home loan last year, he liked the idea of having a mortgage account into which he could have all his pay deposited, and then draw out only what he needed. While his pay is in the account it reduces the amount he owes, and so the interest charged.

Robert knew he was paying a slightly higher interest rate, but he liked the flexibility he got, and the fact that now he has paid off a considerable amount of the loan (he paid in a lump sum last year), he can borrow back up to the amount of the original loan.

This sort of home loan is called an equity overdraft — see page 32 for more about how they work.

Robert's mortgage costs:

- Initial charge: \$300 (refunded by the institution, which also made a \$1000 incentive payment to Robert when the loan was finalised)
- Stamp duty: \$116.
- Mortgage registration: \$106.
- **Total set-up costs:** A profit of \$778 for Robert, though he's committed to an annual fee of \$150.



Fees

Lenders are likely to charge an upfront establishment ('application') fee, typically \$500 or \$600, and they may also charge for a valuation of the property. In the tables under *Establishment fee* we show the combined application, valuation and legal fees that apply to each loan. If you're concerned you may not meet a lender's income requirements for the loan, ask them to check first, before going ahead with the valuation, in case you have to pay for that even if you don't get the loan.

You should also check for regular charges — for the loans in our tables these are from zero to \$96 a year, but they can be much higher. The fees and the establishment costs can make a big difference to the amount you pay for your mortgage. The average annual percentage rate (see Tables 1 to 3) is an effective interest rate that takes into account these charges, making comparison of loans easier.

You'll also find other unavoidable fees: stamp duty on the loan and loan registration. They vary depending on which state you're in.

Exit penalties

When you're considering a loan you should always look carefully at what the costs would be if you wanted to pay it off — because you want to refinance, you want to move and the loan can't be transferred between properties, or you win Lotto.

Many loans have no payout penalties, but if they exist they can be steep, particularly in the early years. The new Credit Code has done much to control the charges, which now have to reflect the true costs to the institution, but they can still be high.

Fixed-interest loans can have particularly high exit penalties if the current variable interest rate is lower than the rate you're paying. If you want to get out of the mortgage, you may have to make up

Help from the ATO?

If you borrow money to invest in something which will produce an income (for example, a rental property or shares), the interest you pay can usually be set off against your taxable income — and so reduce the tax which you'd otherwise pay.

There is now a range of loan packages which bundle together an investment loan and a home loan. What basically happens is that payments you make are directed to paying off the home loan (on which the interest isn't tax-deductible), while the investment loan (on which the interest is tax-deductible) gets bigger — or, at least, is not reduced. The effect is to cut years off the term of the home loan and, because you can make use of a larger tax deduction, also off the investment loan.

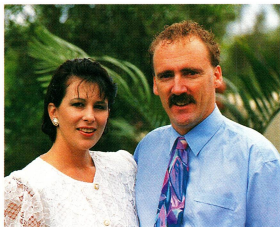
The Australian Taxation Office is, however, keeping its options open. While one of the pioneers of this package (**AUSTRAL MORTGAGE CORPORATION**) has a legal opinion that this arrangement is acceptable under current tax laws, the ATO is yet to produce a definitive ruling, and is looking into the matter carefully — current expectations are that there will be a decision some time this month.

If the ATO does rule against the arrangement, borrowers would probably be liable for all the previously unpaid tax, and interest on that unpaid tax too (currently 10.5% a year).

If you're contemplating a loan designed to make the most of a tax advantage, you should look at what would happen if the tax break was removed — and the costs which may be involved in refinancing.

all the 'lost' interest the bank would have made from your paying the higher rate through to the end of the fixed term; this is called the 'break cost'. For example, if you had two years to run of a fixed period for a

FEE-BLE OFFER?



Allan and Tracey Fuller wrote to us asking for advice. They'd been approached by a 'mortgage reduction' company, which offered to restructure their finances to pay off their mortgage in under 10 years. They wanted to know about schemes like this and whether it was a good idea.

The scheme turned out to be an equity overdraft (see page 32), so we explained how it works, and warned them to check for fees. In particular:

- **Establishment and ongoing fees.** High charges can easily wipe out any savings you make from having all your money going through the account.
- **Transaction charges and account-keeping fees** — because to make the most of the arrangement you run all your finances through the one account.
- **We also suggested they check exit penalties carefully.**

Allan and Tracey showed our fax to their adviser, who took it away to discuss with the mortgage reduction company. Allan tells us he was then "dropped like a hot potato".

Since then he's directly approached a number of lenders offering equity overdraft mortgages, and is currently doing his own sums.



\$100,000 loan at 9%, and the current variable rate was 7.5%, the exit fee could be up to \$3000.

Note: Some mortgages have a one-off fee when you pay your loan off (as distinct from penalties) and you should check this before signing up. We have tried to get information about the likely fees (see the tables), but with some difficulty. We suggest you ask for the actual costs in writing before taking out the loan.

Insurance

Most lenders will lend up to 90% or 95% of the value of the property you're buying. But if you're borrowing over 75% or 80% of the value, they're likely to want you to take out insurance to guarantee your payments.

It's important to recognise that this insurance isn't for you — it's for the lender. If you don't pay and the insurance kicks in, you'll still be liable for the payments and interest you've missed.

This insurance can be expensive. If you're borrowing 90% of the value of the property it's likely to be around 1% of the value — so for a \$200,000 home it would be around \$1800. If you're borrowing a lower proportion, the costs are much lower.

Refinancing

If you're thinking of refinancing your loan — either because lower variable rates are available elsewhere, or because you're paying a fixed rate that now looks high — you'll need to do the sums carefully.

You'll need to check:

- The exit penalties and fee for your current loan (and the new loan you're thinking of entering into — you may want to move again!)
- Establishment and valuation fees for the new loan.
- Any additional legal expenses.
- Government fees (stamp duty is payable in some states).
- The premium for mortgage insurance if it's required.

Where to borrow

In the past you'd have turned to a bank, building society or credit union for your mortgage. But now you can get loans from insurance companies, super funds, specialist mortgage lenders or mortgage managers (such as **AUSSIE HOME LOANS**).

Mortgage managers bundle up mortgages and then sell them on the money market. They're bought by investors who want to be paid the interest borrowers are paying. The managers continue to set interest rates and control your loan, but you're actually borrowing the money from another source.

Our advice is that basically you shouldn't worry where your loan comes from — what's important is a combination of interest rate, features and ease of access.

We do have some concerns about what would happen to the very competitive interest rates for existing loans set by some of the smaller mortgage managers if they were to go out of business — in particular whether they would remain as competitive, because there could be less incentive for the new manager or trustee to keep them as low.

However, even having said this, there are few financial concerns for a borrower. If a financial institution gets into trouble it's not the same concern if you owe them money as it would be if the position was reversed.

Certainly some lenders are more accessible than others, but home loans these days can be arranged over the phone and home visits by representatives are quite common.

Whatever kind of lender you choose, remember they need to lend money to stay in business, and you might well try to negotiate a better deal than you're originally offered — lower set-up costs, for example.

MORTGAGE BROKERS

Using a mortgage broker or 'introducer' is much like using any intermediary. Good ones can be very useful, helping you find a lender prepared to offer you a home loan — that is, one whose borrowing criteria you meet — and with the paperwork and documentation.

But they'll be working with a limited number of lenders, and usually on a commission basis. You need to be sure that the commission paid isn't influencing their advice, though you're likely to get the same deal through the broker as you would if you went directly to the lender.

We have also heard of brokers who give advice and charge the customer instead of taking a commission. In principle this is the best arrangement — because the broker then can't be influenced by commissions.

Save \$'000s on your home loan

There are only three ways to save money on your home loan: by paying lower interest rates, by borrowing less, or by borrowing for a shorter time.

The 'trick' of making fortnightly payments could indeed cut five years off a 25-year mortgage and therefore save you money. It's because there are 26 fortnights in a year — so if you make half a monthly payment each fortnight you're making the equivalent of an extra monthly payment each year.

To borrow less you can make use of any money you've got to reduce the amount you owe. So instead of having money in a term deposit or savings account, you make extra payments off your home loan.

However, you may not want to tie up your 'spare' cash, and lenders offer a range of options which still allow you to have access to your money: **mortgage offset accounts** and **redraw facilities** (see *Home loan features* on page 35).

Borrowing less in this way can be a very tax-effective 'investment', too, because you don't directly receive any interest on which you have to pay tax (instead it's credited towards your loan). Although you're not earning any money, you're saving it — often at the same interest rate you're paying for your home loan. At 8% this means you're saving, and in effect 'earning', interest at 8% tax-free. If you were paying tax at the top rate of 48.7% (including Medicare) you'd need to earn interest at a rate of 15.5% a year to get the same effect on your after-tax income.

Irons

Ironing with some newer irons doesn't have to be as painful as it used to be — our trialists found that with plenty of steam and spray, creases disappear with ease.



IN BRIEF

- Almost all the irons effectively removed creases and wrinkles at the recommended setting, except on synthetic fabric, where trialists found they often had to increase the temperature to get a good result.
- Ease of use was the main factor that separated out the irons: the scores for this ranged from just 47% to 72%.

WHEN FACED WITH AN EVER-increasing pile of clothes to iron, you don't want to get hot under the collar, you just want to get the job done — once again our trialists preferred irons with good steaming ability to help ease the load.

They put to the test 10 irons in the medium price range, costing between \$40 and \$60. Some of the brands tested have other models within this price range that are similar technically but have different features. They're listed under *Comparable models* on page 41. Unfortunately Breville released a new range of models too late for this test.

We used 13 people who iron occasionally or regularly in our trial. They assessed the performance and ease of use of each iron while ironing a selection of clothing and fabrics: polyester organza, cotton,

denim and linen. We've used their combined scores as the basis on which to rate the irons, as they indicate how well they'll work in real-life use.

A number of lab tests were also carried out to check the irons' safety and to assess whether or not they overheated when first turned on (see note 7 on page 41 for more on this). All the models passed our electrical safety tests. The profiles, right, include comments from both the trial and the technical tests to give an overall picture of the top four irons.

WHAT TO BUY

SUNBEAM Pro-Steam SR410	\$60
BLACK & DECKER Quick 'n Easy X480	\$58
MOULINEX Chronomate 44 Silk Plus AX8	\$60
PHILIPS HI 212	\$40

For people with a disability

An occupational therapist from the Independent Living Centre assessed the irons for ease of use by people with a disability. When you're shopping the following features are worth looking for (as well as those listed in *What to look for*, on page 40)

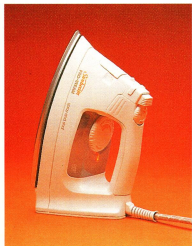
- The handle should be large and easy to hold, with unrestricted finger space between the handle and the body of the iron.
- A cord that swivels is preferable to a fixed cord or one with a restricted motion that may make it harder to manipulate the iron. The only iron without a swivel cord was the **LINDA SL56**. The **BLACK & DECKER Quick 'n Easy X480** also had a very inflexible cord.

- Lighter irons are easier for people with weak hands, wrists or arms to lift.
- The markings on the controls need to be easy to read for people with poor vision. The controls should also be large, with a good grip and in an accessible position. The **BLACK & DECKER**, **LINDA** and **MOULINEX** have controls which are easy to see and use.
- Look for an iron with a large opening that can be filled in the upright position using only one hand.
- A good safety feature for people with memory problems is auto shut-off. Both the **BLACK & DECKER** and the **TIFFANY SI955** have this feature.

PROFILES

Profiles are of models in the *What to buy* list, in rank order. Prices shown are a good target to aim for when shopping around, based on nationwide checks in April 1997. Anything lower is a bargain.

SUNBEAM Pro-Steam SR410



Target price: \$60

Good points

- Well balanced, smooth and comfortable to use — "a good weight", said one trialist.
- Very effective on denim.
- Controls very easy to read and change.
- Easy to fill and empty.
- The iron's steam control valve can be removed for cleaning.

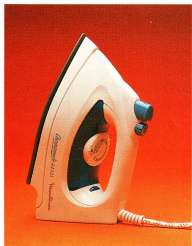
Bad points

- Although the iron has a light to show that the power is on, there is no pilot light to

indicate when it reaches the appropriate temperature.

- One button operates both spray and shot of steam. You have to slide a switch to select the appropriate function, which means you can't quickly and easily spray when the switch is set to the shot of steam function, and vice versa.

MOULINEX Chronomate 44 Silk Plus AX8



Target price: \$60

Good points

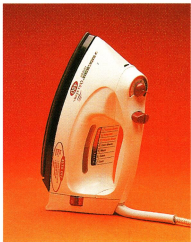
- Smooth movement — one trialist commented, it "glided over the clothes well".
 - Controls very easy to read.
 - Convenient cord placement.
- As one trialist said, "It didn't get in the way and swivelled as the iron moved."

Bad points

- Awkward to refill as it needs to be in a horizontal position.
- A number of trialists had trouble making the extra burst of steam work.

- Cord is relatively short (just 2 m) and it easily slipped off the cord storage space provided.

BLACK & DECKER Quick 'n Easy X480



Target price: \$58

Good points

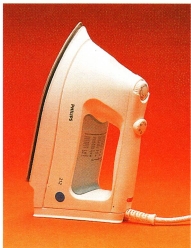
- Light and easy to manage — as one trialist said, "A nice light and small iron."
- Very effective on denim.
- Controls very easy to read and change.
- Very easy to fill and empty.
- Water spray worked very well. As one trialist said, "Nice even spray — not too wet and it landed where you wanted it."
- Fastest to heat up.
- Auto shut-off after approximately 10 minutes of no

movement (you use the on/off switch to restart the iron).

Bad points

- Handle was uncomfortable for some trialists.
- Got too hot in our initial peak temperature test when first switched on — with some fabrics this could lead to damage.
- Although the iron has a light to show that the power is on, there is no thermostat light to indicate when it reaches the appropriate temperature. This is particularly unfortunate given its performance in our initial peak temperature test — one way to be surer of the right temperature is to wait for the thermostat to go through another cycle (with many irons you just wait for the thermostat light to go on and off again). But with no light there's no indication of when this has happened. See note 7 on page 41 for details.

PHILIPS HI 212



Target price: \$40

Good points

- Very easy to fill and empty.
- One of the better performers for ironing the synthetic material.

Bad points

- No shot of steam or spray function. However, as one trialist said, "This was a good all-round iron. The only thing I would add would be a water spray." (Note: The PHILIPS HI 222 and HI 232 do have a spray, and are otherwise technically similar to the HI 212)

STEAM IRONS

1 2 3 4

Brand / model (in rank order)	Manufacturer / distributor	Target price (\$)*	Origin	Warranty (years)	Soleplate type	Weight (kg)**	Auto shut-off	Adjustable steam	Shot of steam	Sp
SUNBEAM Pro-Steam SR410 (A)	Sunbeam Victa	60	Australia	1	Polished aluminium	1.2		✓	✓	✓
BLACK & DECKER Quick 'n Easy X480	Black & Decker	58	Malaysia	2	Silverstone	1.1	✓	✓	✓	✓
MOULINEX Chronomate 44 Silk Plus AX8	Mobex	60	France	1	Non-stick	1.0		✓	✓	✓
PHILIPS HI 212	Philips	40	Singapore	1	Silverstone	1.2		✓		✓
BRAUN Turbo-Jet PV 1002	Braun	70	Spain	1	Polished aluminium	1.3		✓	✓	✓
LINDA SL56	Linda Electric	45	Australia	1	Polished aluminium	1.1			✓	✓
RONSON Steam & Dry 7610 (B)	Thebe International	40	China	1	Polished aluminium	0.9		✓	✓	✓
KENWOOD Emerald ST622	Breville	60	China	1	Non-stick	1.2			✓	✓
TIFFANY SI955	GAF Control	43	China	1	Non-stick	1.3	✓	✓	✓	✓
KAMBROOK Steamaster KI-451	Kambrook	55	China	1	Non-stick	1.1			✓	✓

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in April 1997.

** Without water.

(A) You'll probably have to look in specialist appliance shops for this iron, rather than department stores.

(B) This iron also has a number on its box which refers to its type, CP 402.

(C) Has a removable steam control valve.

(D) The manufacturer says the steam valve is automatically cleaned when the temperature dial is turned to '0'.

(E) We found the cord storage ineffective as the cord slips off easily.

WHAT TO LOOK FOR

Some of our trialists found the Kambrook Steamaster KI-451's removable water tank difficult to fill and empty. Also, the coloured tank makes it hard to determine how much water is left in the iron.

■ A **non-stick soleplate**, such as Silverstone, is easier to keep clean as fabrics and starches are less likely to stick to the soleplate. You do have to be careful, though, not to scratch the surface by ironing over things like buttons and zips. Just over half the irons we tested had a non-stick soleplate; the others had a traditional **polished aluminium soleplate**, which glides well across fabrics and has even heat distribution.

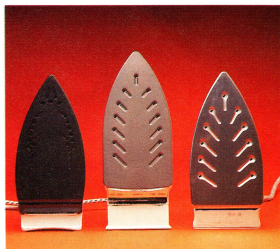
■ If you're concerned about safety or saving energy, an **auto shut-off** will automatically turn off the iron if it has not been moved for a certain period of time.

■ Different fabrics need different amounts of steam depending on their weight and how creased they are. An **adjustable-steam function** allows more steam to be applied when necessary or less steam if the fabric is sensitive and prone to damage from excess water.

■ Sometimes one crease may be more stubborn than the rest. In this situation it's good to have either a **shot of steam** or **spray** feature, both of which allow for extra moisture to be applied to one spot and so make it easier to iron.

■ An iron with a **self-cleaning function** is easier to maintain, as you can flush out the layer of scale and other mineral deposits which can block the steam holes if allowed to build up.

■ A **thermostat pilot light** is a useful feature for determining when the iron has reached the correct operating temperature for a particular fabric. The **BLACK & DECKER** and the



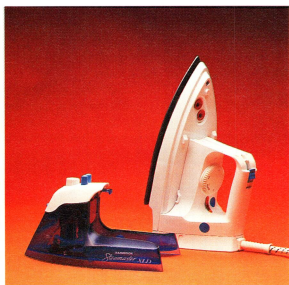
The type of soleplate didn't seem to affect our trialists' preferences — there were two Silverstones, one other non-stick coating and a polished aluminium soleplate in the *What to buy* list.

SUNBEAM only have lights that indicate 'power on'.

■ Depending on where you do your ironing you may want to check the **length of the cord**. Also, **cord storage** makes it easier to keep control of the cord while the iron's not being used.

■ It's much easier, and less expensive, if you can use **tap water** in your iron. All the irons we tested could, although most manufacturers advise the use of distilled water or demineralised water if you live in a hard-water area.

■ A **filler cup** is useful, especially if it's designed with the shape of the opening in mind and can help to prevent spillage. The only irons without a filler cup in this test were the **BLACK & DECKER** and the **MOULINEX**. As the **KAMBROOK Steamaster KI-451** has a removable water tank a filler cup isn't needed.



	5	6	7	8	9	10	
Self-cleaning	Cord length (m)	Cord storage	Heat-up time (seconds)	Initial peak temperature test	Fabric ironing score (%)	Ease of use score (%)	Overall score (%)
(C)	3.0		55	OK	64	72	69
(D)	4.1	✓	39	Too high	65	67	66
✓	2.0	✓ (E)	50	OK	65	63	64
✓	2.5	✓	66	OK	62	64	63
✓	2.0	✓	70	Too High	57	58	58
✓	3.1		75	OK	59	57	58
✓	1.9	✓	41	OK	53	60	57
✓	2.3	✓	55	Too high	53	57	55
✓	3.0	✓	61	OK	57	54	55
✓	3.0	✓	53	OK	51	47	49
Brand / model (in rank order)							
SUNBEAM Pro-Steam SR410 (A)							
BLACK & DECKER Quick 'n Easy X480							
MOULINEX Chronomate 44 Silk Plus AX8							
PHILIPS HI 212							
BRAUN Turbo-jet PV 1002							
LINDA SL56							
RONSON Steam & Dry 7610 (B)							
KENWOOD Emerald ST622							
TIFFANY SI955							
KAMBROOK Steamaster KI 451							

Comparable models

■ The **PHILIPS HI 212** tested is technically similar to the **PHILIPS HI 222** and **HI 232**, except they have a spray as well as adjustable steam. The **HI 232** also has a cord winder. The **HI 220** is similar to the **HI 222** except that it has an aluminium soleplate.

■ The **SUNBEAM Pro-Steam SR410** tested is technically similar to the **SUNBEAM SR110** and **SR115** except they have no shot or spray; the **SUNBEAM SR210** and **SR215** which have spray only; and the **SUNBEAM SR310**, which only has shot of steam. Also, the **SR115** and the **SR215** have Silverstone-coated soleplates.

■ The **LINDA SL56** tested is the same as the **LINDA SL55** except that the latter has spray instead of a shot of steam; and the **LINDA SL57NS**, which has an aluminium non-stick soleplate, shot of steam and spray.

■ The **BLACK & DECKER Quick 'n Easy X480** tested is technically the same as the **BLACK & DECKER X440** except that the latter has no shot of steam or spray.

■ The **KAMBROOK Steamaster KI-451** tested is the same as the **KAMBROOK KI-421** except that the latter doesn't have a 'steam burst' button; and the **KAMBROOK KI-601**, which has auto shut-off and a stainless-steel soleplate.

1 Auto shut-off

This is a safety and energy-saving feature which automatically switches the power off if the iron is not moved or handled within a certain amount of time.

2 and 3 Adjustable steam and shot of steam

These allow you to adjust the volume of steam to suit the level of creasing or type of fabric. Heavy fabrics with heavy creases need a high temperature and high steam flow, while sensitive or lighter fabrics need low levels of steam, otherwise they may be damaged or temporarily discoloured.

4 Spray of water

As with shot of steam, this feature is particularly effective when stubborn creases can't be smoothed out.

5 Self-cleaning

See *What to look for*, left, for an explanation of this feature. It may operate in various different ways.

6 Heat-up time

Irons were tested to see how long it took the soleplate to reach 180°C above room temperature. The slowest iron was the **LINDA SL56**, which took almost half the time of the fastest, the **BLACK & DECKER Quick 'n Easy X480**.

7 Initial peak temperature test

When initially heating up, an iron usually exceeds the preset temperature on its temperature dial setting. It's important to be aware of this and start ironing on an inconspicuous piece of fabric to ensure it isn't damaged.

Some irons have thermostat pilot lights which indicate when the iron has reached the set temperature (see *What to look for*, left). To avoid ironing with too high an initial temperature, use this light to show you when the iron has gone through a full thermostat cycle of cooling down and heating up again.

Three of the irons reached temperatures higher than 40°C above the set temperature. The **KENWOOD Emerald ST622**, as the worst of the three, was tested on polyester organza with-out damaging it, but some more delicate fabrics might suffer.

8 Fabric ironing score

The trialists evaluated the effectiveness of the iron at removing

wrinkles and creases from four different fabrics (polyester organza, cotton, denim and linen). The score is the average of the four fabrics.

9 Ease of use score

To assess ease of use, the trialists rated the following: steam facility, water spray and shot of steam (if present), smoothness of movement, handle comfort, cord placement, weight of the iron, how easy the water tank was to fill and empty and how easy controls were to read and change.

10 Overall score

The overall score was calculated as follows:

■ Fabric ironing score: 40%

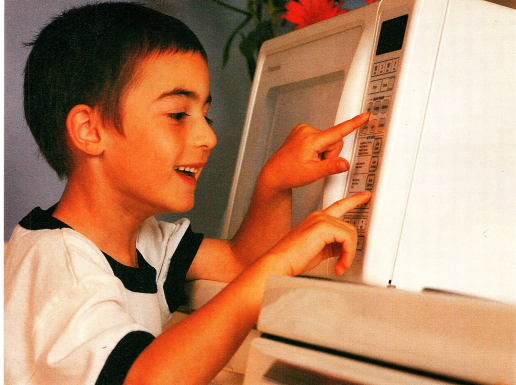
■ Ease of use: 60%

We gave ease of use a higher weighting because our trialists emphasised these aspects in their scoring and discussions.

Our trialists ironed for several days to choose the best irons!



*Smaller
microwaves now
have many of the
features and
automatic
functions common
on larger models.*



A safety lock that prevents children from starting the oven is becoming more common on microwaves.

Compact microwaves

IN BRIEF

- One microwave in this test stood out for cooking performance: the Panasonic NN-S546WA.
- Three of the models in the test performed better when we set them manually than when using their automatic functions — not a very satisfactory result.

MICROWAVES ARE AS POPULAR AS they are convenient — around 80% of Australian households already own one, making it difficult for manufacturers to expand on what is already an almost saturated market.

Many are trying to increase their sales by promoting compact-size microwaves (up to 29.9 L) to people starting new households, such as young people moving out of home or newly weds, for example, who wouldn't be interested in larger family-size ovens.

These smaller microwaves are popular — models with 20 L to 29.9 L capacity now make up almost 50% of all models sold. We tested all the available models closest to 25 L and selling for up to \$500 — nine models in all.

Microwaves of this size now come with at least some of the features common on larger models — see *What to look for* on page 44 for the kind of capabilities you could find. They are also now generally operated by electronic touchpads.

Which are the best?

We put the microwaves through their paces by cooking, defrosting and reheating food in them, and by checking how easy they are to use. We set them manually for some tasks, and also tried some of their automatic functions (cook, reheat and defrost) when they had them.

Three of the microwaves — the PANASONIC NN-S546WA, the BOSCH MW29 and the SHARP Carousel R-3C59 — achieved better results for cooking when we set them manually than when we used their automatic cooking programs.

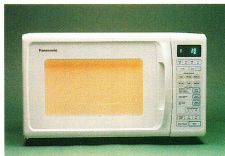
While the PANASONIC came top overall in our tests — with a particularly good cooking score — you might want a model with different features or different automatic programs. The profiles (right) of the top three performers will help you decide which of them would best suit you.

WHAT TO BUY

PANASONIC NN-S546WA	\$269
PANASONIC PMO-750	\$219
BOSCH MW29	\$340

PROFILES

The profiles are of the models in the *What to buy* list and are in rank order. Prices shown are a good target to aim for when shopping around, based on nationwide checks in March and April 1997. Anything lower is a bargain. Most features mentioned in the profiles are explained in *What to look for*, page 44.



PANASONIC NN-S546WA

Target price: \$269

Good points

- Best overall cooking performance in this test.
- Best manual cooking results, especially for defrosting mince and reheating a typical meal.
- Good auto defrost of chicken and mince, and good auto cooking of broccoli.
- Good selection of automatic functions.
- Electronically displayed operation guide.
- Child safety lock, which you have to set manually.
- Kitchen timer.
- Delayed/auto start function.
- Multistage programming.
- Controls are easy to use.

Bad points

- Poor results for auto reheat of a typical meal.
- Harder to clean due to many small dirt traps.
- Electronic digital clock is in 24-hour mode, which may not suit some people.
- No more/less function.
- No quick-start function.
- No hold/warm function.
- No memory function.
- User manual includes instructions for more than one model, making it harder to follow.



PALSONIC PMO-750

Target price: \$219

Note: This is the smallest of the three ovens in the *What to buy* list — see the table for details.

Good points

- Equal best at defrosting chicken on manual setting.
- Good at cooking broccoli on manual setting.
- 'More' function ('Minute Plus').
- Quick-start function ('Quick cook').
- Multistage programming.
- Controls are easy to use.
- Has a 12-hour electronic digital clock.
- Instructions are generally easy to use.

Bad points

- No child safety lock
- No kitchen timer.
- Harder to clean due to many small dirt traps, especially on the door latch.
- No 'less' function.
- No delayed/auto start function.
- No memory function.
- No hold/warm function.



BOSCH MW29

Target price: \$340

Good points

- Equal best at cooking broccoli and reheating a typical meal on manual setting.
- Good selection of automatic functions.
- More/less function for automatic programs.
- Quick-start function.
- Delayed/auto start function.
- Multistage programming.
- Instructions are easy to use.
- Generally easy to clean.

Bad points

- No child safety lock.
- Electronic digital clock is in 24-hour mode, which may not suit some people.
- No memory function.
- No hold/warm function.
- No kitchen timer.

FOR PEOPLE WITH DISABILITIES

An occupational therapist from the Independent Living Centre assessed the microwaves for ease of use by people with a disability. Due to their design, no model in this test could be recommended as the best for someone with a disability. However, some of the following features will help:

- **An easy-to-open door:** The **PANASONIC NN-S546WA** and the **SHARP Carousel R-3C59** both have door handles that are easy to grip and to get your fingers behind the handle.
- **Clear view through the door:** Look for a bright light inside the microwave, and a door with an easy-to-see-through mesh. The **WHIRLPOOL V1P20 Crisp Series** has a dark mesh that's hard to see through.

- **A display that's easy to read and understand:** Good colour contrasts are important; dark letters on a light background can be easier to read. The displays on the **SHARP** (yellow writing on a dark grey background) and the **WHIRLPOOL** (purple writing on a purple display) are harder to read.
- **A control panel that's easy to read and use:** Words and symbols on the controls should be large enough to read easily. Raised touchpads or buttons make locating the controls easier, compared to a completely flat control panel.
- **Easy to remove turntable:** Smaller turntable plates are usually lighter and easier to handle, and those that are elevated off the floor of the oven are usually easier to pick up. The **PALSONIC PMO-750** is good in this regard.

COMPACT MICROWAVES

Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price (\$)*	Warranty (years)	Power output (W), stated / measured	Measured external dimensions **, HxWxD (mm)	Measured internal height / turntable diameter (mm)	Auto cook	Auto reheat
PANASONIC NN-S546WA	Panasonic	US	269	1 (C)	930 / 990	305 x 510 x 365	230 / 320	✓	✓
PALSONIC PMO-750	NG Enterprises	China	219	1	800 / 890	295 x 495 x 340	200 / 285	✓	✓
BOSCH MW29 (A)	Bosch	Korea	340	2	1000 / 1060	345 x 525 x 385	245 / 315	✓	✓
SHARP Carousel R-3C59	Sharp	Thailand	279	1	1000 / 1080	300 x 520 x 420	215 / 340	✓	✓
MITSUBISHI Twin Wave RA-S50	Mitsubishi	Korea	229	1	900 / 920	280 x 495 x 350	215 / 310	✓	✓
WHIRLPOOL VIP20 Crisp Series AVM450	Whirlpool	Sweden	495	2	800 / 920	280 x 525 x 345	175 / 280	✓	✓
NEC N-908E (A)	NEC	Korea	239	1	900 / 940	290 x 495 x 385	215 / 290	✓	✓
SANYO EM-F301W (A)	Sanyo	Singapore	259	1	850 / 960	285 x 530 x 410	200 / 340	✓	✓
SAMSUNG Timesaver M9245 (B)	Samsung	Korea	249	2	1000 / 1080	320 x 515 x 390	225 / 320	✓	✓

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in March and April 1997.

** External dimensions include any parts jutting out of the rear panel.

(A) The manufacturer says this model has been discontinued recently, but you may still find it in shops.

(B) The manufacturer says this model will be discontinued soon.

(C) Optional two-year warranty plan.

Reliability

We asked a group of subscribers whether their microwave had needed to be repaired in the previous 12 months and whether they would buy the same brand again.

Overall, we found microwaves are a reasonably reliable appliance, with only 6% of the brands surveyed needing repair in the last year. And 96% of all respondents said they would buy the same brand again.

The average cost of repair was about \$93.

Percentage not needing repair

Toshiba (132)	98
Philips (146)	97
Palsonic (94)	95
NEC (106)	94
Panasonic/National (1425)	94
Sanyo (390)	94
Sharp (1410)	94
Samsung (80)	93
Westinghouse (64)	89

Percentage who would buy the same brand again

Panasonic/National (1415)	98
Sharp (1409)	98
Samsung (78)	95
Toshiba (134)	95
Palsonic (95)	94
Sanyo (383)	94
Philips (144)	93
NEC (104)	91
Westinghouse (65)	91

WHAT TO LOOK FOR

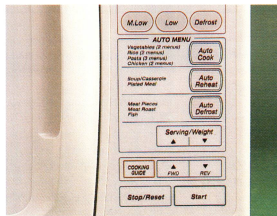
■ **The basics:** Look for an oven with easy-to-use controls and instructions that are easy to follow. A large, clear viewing window that isn't too dark to see through (unlike those with dark mesh grills) with a bright even light inside is helpful. Ovens with too many seams, cracks or grooves on the inside and outside can be difficult to keep clean. Make sure you can fit any microwave-safe cooking dishes that you already have in it.

■ **Grill:** A microwave oven with a grill element has the advantage of low-energy microwave cooking in addition to being able to brown your food in the one appliance. Some microwaves come with the element and a special plate so you can brown the surface of food such as pizzas, pastries, bread or casseroles.

■ **Microwave source:** In an attempt to cook food more evenly and prevent 'hot spots', some microwave ovens now have more than one source (or a differently shaped source) of microwaves. In this test, the **SANYO EM-F301W** is claimed to have a 'Shower wave', the **MITSUBISHI RA-S50** uses 'Twin Wave' in its name, and some ovens even call themselves 'Multi-wave'. However, none of these claimed features produced a better performance in our cooking tests.

■ **Automatic cook/automatic reheat:** This is very convenient for dishes you make regularly, or when you're unsure how long (and at what power level) something should be cooked. You simply choose the code for the type of food (which must be within a certain weight range), then the oven selects the power level and calculates the time needed to cook or reheat the food to an appropriate temperature.

An operation/information guide is a useful feature. Instructions on how to use certain features and programs appear on the display, and can be turned off when not needed.



● RECALLS & BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Woolworths

Supermarkets, Food For Less and Flemings Food Stores in NSW and the ACT have recalled **Aussie Beef Thin and Aussie Beef Thick sausages**, manufactured by Chisholm Manufacturing in Sydney, and sold from their meat departments with packed-on dates of April 8, 9, 10 and 11. This recall does not apply to stores in Tweed Heads, Ballina, Byron Bay, Casino, Lismore, Grafton, Corowa, Albury/Wodonga or Broken Hill. No other varieties of sausage are affected.

The problem: Some products may contain traces of small metal filings.

What to do: Do not eat the sausages. Return them to your nearest Woolworths supermarket, Flemings or Food For Less food store for a full refund. For further enquiries, contact the customer information line on 1800 626 626.

THE PRODUCT: Safeway

Supermarkets has recalled **BBQ Thin Sausages and Thin Sausages**, manufactured by Chisholm Manufacturing in Melbourne and sold from Safeway's meat and delicatessen departments respectively, between March 25 and April 2, 1997.

The problem: The sausages may contain traces of a blue food dye which affects their colour when cooked. This food-grade dye is not a threat to public health.

What to do: Return the sausages to your nearest Safeway Supermarket for a full refund. For further information, call the product recall co-ordinator on 1800 626 626.

THE PRODUCT: Cerebos Foods has recalled **Taby Rolled Fillets of Anchovied Sardines in vegetable oil with capers**, 56 g ring-pull can, batch code C 238 1P 16 HV (on can lid), best before 31/07/1998 (on packet), imported from Portugal, distributed throughout NSW.

The problem: Some cans have shown unidentified spoilage which could pose a health risk.

What to do: Do not eat this product. Return cans to the place of purchase for a

full refund. If you have consumed this product and experienced nausea, vomiting and/or diarrhoea, see your doctor. For further information, contact Cerebos consumer relations on 1800 656 115.

THE PRODUCT: Brauer Biotherapies has recalled **Infant and Baby Teething Relief**, 100 mL bottle oral liquid, batch number HC111, expiry date 02/00.

The problem: The level of yeast in this batch is above an acceptable level and may cause fizzing and production of gas within the bottle which causes the teat pipette to expand.

What to do: Do not use this product. Call Brauer Biotherapies' customer service on 1800 625 300 to arrange return of the product and a refund. If you are concerned about use of this batch, ring the customer service number or see your doctor.

THE PRODUCT: BMW has recalled **BMW motorcycles R 850 R and R 1100 R models** with the following frame number ranges:

R 850 R: 0353732 to 0354739.
R 1100 R: 0360102 to 0368707.

The frame number is found on the compliance plate, fixed to the frame.

The problem: The ignition wiring loop that connects to the ignition/steering lock may be rubbing on the front frame below the instrument cluster, resulting in the ignition wiring circuit being damaged and total electrical failure could occur, particularly when handlebars are fully turned.

What to do: If your motorcycle is within the affected range and you have not been contacted by BMW, contact any authorised BMW motorcycle dealer for checking and possible rectification. For further information, contact any authorised BMW motorcycle dealer or BMW Australia, BMW Access Centre, on 1800 813 299.

THE PRODUCT: Fosseys has recalled **Helio Baby Wah Hing Teddy Bear Musical Activity Board** sold by Fosseys and Coles Variety stores.

The problem: Components of the activity board may break when dropped, releasing fragmented metal pieces.

What to do: Do not use this toy. Return it to your nearest Fosseys or Coles Variety store for refund or exchange. For further information call (03) 5246 3100.

THE PRODUCT: IGC has recalled **Evenflo Scout Carseats**, Australian Standard label serial numbers from

CC758439 to CC761000 and from CC765001 to CC765438. The Evenflo Scout nameplate can be found on the front lower right-hand side of the product and the serial number can be found on the Australian Standards label at the upper rear of the car seat. These products were sold through K-Mart and Target stores from February 18, 1997, onwards.

The problem: On some seats the harness adjuster, situated at the front of the seat, may not clamp the harness webbing securely, which could result in a child not being secured correctly in the event of severe braking or head-on collision.

What to do: If your car seat falls within the above ranges, do not use it until it has been modified. Return the car seat to the shop where it was purchased for replacement of the affected component by IGC. For further information call the consumer hotline on 1800 809 526.

THE PRODUCT: Faulding Healthcare has recalled **4 Wheel Stroller/Walker Model 4200-A2**. [Note: This is a walking-assistance product, not a baby walker.]

The problem: There have been some instances of the front castor axle loosening, which could affect safety and performance.

What to do: To arrange for inspection and modification or replacement where necessary, call the Faulding customer service hotline on 1800 651 654, 10.30 am to 4.30 pm, Monday to Friday.

THE PRODUCT: Don Smallgoods has recalled:

■ **Don Latvian Liver Spread**, 250 g, product identification code 001, use-by date 24/4/97.

■ **Don Deli Supreme Kabana**, 375 g, product identification code 901, use-by date 12/5/97.

The recall applies only to these two specific batches of these two products.

The problem: Tests showed these batches of the two products contained *Salmonella adelaide* bacteria.

What to do: Do not eat these products. Return them to the point of purchase for an immediate full cash refund. For further information, call 1800 800 696.

THE PRODUCT: In Queensland, Tasmania and Victoria, **Fabbris Smallgoods** has recalled **Fabbris Corned Silverside, Fabbris Virginian Ham and Fabbris Traditional Leg Ham** with use-by dates up to and including April 30, 1997. These products were labelled and packaged by Fabbris,

but some people may have purchased them as sliced meat.

The problem: These products have been recalled in relation to an outbreak of salmonella poisoning in Victoria.

What to do: If you have any of the above products, do not eat them. Dispose of them or return them to Fabbris Smallgoods, 47 McNamara Ave, Airport West 3042. For further information call (03) 9338 3894.

THE PRODUCT: Carnforth has recalled the following abacus-style toys:

■ **Wooden counting frame with six rows**, each with 10 coloured beads (18 cm x 18 cm).

■ **Play and learn plastic combination locomotive with clock face and counting bead frame** (22 cm x 16 cm).

■ **Combination wooden abacus with clock face** (12 cm x 9 cm).

These toys have been on sale since August 1996.

The problem: These toys do not comply with Australian standards for toys for children under the age of three, as they contain small parts which may pose a choking hazard.

What to do: Do not use these toys. The supplier gave limited information about what to do with them, so if you have one we suggest you return it to the shop you bought it from or contact Carnforth, 131 Keys Road, Moorabbin 3189; phone (03) 9532 3200.

THE PRODUCT: In NSW, Queensland, SA, Tasmania and Victoria, **Lago Smallgoods** has recalled **Lago Corned Beef, Lago Baked Virginian Leg Ham and Lago Easy Cut Leg**

SAFETY NOTICE

THE PRODUCT: Hasbro has issued a safety notice on the **Playskool 1-2-3 High Chair**, sold exclusively through Toys 'R' Us stores with serial numbers between TX 51321 and TX 61442. (The serial number is on the back of the seat.)

The problem: The restraint bar on these high chairs may crack, and possibly allow a child to fall out of the chair.

What to do: Contact Hasbro on 1800 023 058 during business hours (EST) to obtain a free replacement restraint bar.

Ham, with use-by dates up to and including April 24, 1997. These products were labelled and packaged by Lago but may have been sold as sliced meat.

The problem: These products have been recalled in relation to an outbreak of salmonella poisoning (*Salmonella muenchen*) in Victoria.

What to do: Do not eat these meat products. If you have suffered illness after eating them and your symptoms persist, see your doctor. Dispose of the meat or return it to Lago Smallgoods, 246 Edwards Street, Reservoir 3073, for a refund. For further information, call (03) 9460 5222.

THE PRODUCT: Woolworths has recalled **Home Brand Toothpaste, fluoride, 100 g**, and **Blue Gel, 150 g**, purchased in NSW, the ACT and Victoria from any Woolworths or Safeway store between March 12 and March 27, 1997.

The problem: Woolworths describes the recall as a 'precautionary measure' based on a few isolated quality problems.

What to do: Do not use the toothpaste. Return it to any Woolworths/Safeway Supermarket, Food For Less or Flemings food store or Town Hall Variety Store for a full refund. For more information call 1800 811 144.

THE PRODUCT: Coles and Bi-Lo supermarkets in all states except SA, WA and the NT have recalled **imported Smoked Cod** sold in their delicatessens up to and including March 25, 1997.

The problem: The product may be 'off' due to refrigeration problems during transport from South America.

What to do: Do not eat the smoked cod. Return it to the shop you bought it from for a full refund. For further information call the customer information line on 1800 061 562.

THE PRODUCT: Hitachi has recalled **Hitachi Ni-Cad Battery, type FEB 9**, serial number 86, supplied with some **Hitachi Cordless Driver/Drills, model FDS10DVA**. The battery type is marked on the outside of the battery and the serial number can be read once the battery is removed from the drill.

The problem: Under some circumstances, the battery may overheat during recharging.

What to do: If you own this model of drill, check the serial numbers of both batteries. If the serial number is 86, do not use the battery. Call Hitachi on 1800 806 597 to arrange return and replacement.

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* indicates update of previous report, additions or corrections to reports, small follow-up items, or letters.

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